Gly Pro Ala Ala Cys Glu His Pro His Gln Ala Ala Ala Gln Thr Cys 165 170 175

Gly Ala Trp Ser Ser Gly Cys Arg Gly Met Leu Arg Ser Trp Ala Met 180 185 190

Arg Pro Ser Gly Ser Lys Ser Cys Ala Gly Ser Arg Pro Gly Ser Glu 195 200 205

Arg Asp Arg His Ala Cys Arg His 210 215

<210> 1026

<211> 604

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (303)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (359)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1026

Gly Thr Ser Ser Asp Ile Leu Lys Gly Asn Phe Ser Ile Arg Thr Ala 1 5 10 15

Lys Met Gln Gln His Val Cys Glu Thr Ile Ile Arg Ile Phe Lys Arg 20 25 30

His Gly Ala Val Gln Leu Cys Thr Pro Leu Leu Leu Pro Arg Asn Arg 35 40 45

Gln Ile Tyr Glu His Asn Glu Ala Ala Leu Phe Met Asp His Ser Gly 50 55 60

Met Leu Val Met Leu Pro Phe Asp Leu Arg Ile Pro Phe Ala Arg Tyr 65 70 75 80

Val Ala Arg Asn Asn Ile Leu Asn Leu Lys Arg Tyr Cys Ile Glu Arg 85 90 95

Val Phe Arg Pro Arg Lys Leu Asp Arg Phe His Pro Lys Glu Leu Leu 100 105 110

GIU	Cys	115	PHE	Азр	116	vaı	120		1111	1111	vaii	125	1116	Deu	
Thr	Ala 130		Ile	Ile	Tyr	Thr 135		Tyr	Glu	Ile	Ile 140		Glu	Phe	Pro
Ala 145		Gln	Glu	Arg	Asn 150	Tyr	Ser	Ile	Туr	Leu 155		His	Thr	Met	Leu 160
Leu	Lys	Ala	Ile	Leu 165		His	Cys	Gly	Ile 170		Glu	Asp	Lys	Leu 175	
Gln	Val	Tyr	Ile 180		Leu	туr	Asp	Ala 185		Thr	Glu	Lys	Leu 190		Arg
Arg	Glu	Val 195	Glu	Ala	Lys	Phe	Cys 200		Leu	Ser	Leu	Ser 205	Ser	Asn	Ser
	210	-		_	-	215					220		Leu		
225					230					235			Gly		240
				245					250				Val	255	
			260					265					Leu 270		
		275					280					285	Phe		
Phe	11e 290	Lys	Arg	Arg	Gln	Arg 295	Ala	Val	Pro	Glu	Ile 300	Leu	Ala	Xaa	Gly
305	_	-	-		310					315			Gln		320
				325					330				Asp	335	
Ser	Ala	Ala	Val 340	Leu	Asn	Met	Glu	G1u 345	Ser	Val	Thr	Ile	Ser 350	Ser	Cys
Asp	Leu	Leu 355	Val	Val	Ser	Xaa	Gly 360	Gln	Met	Ser	Met	Ser 365	Arg	Ala	Ile
Asn	Leu 370	Thr	Gln	Lys	Leu	Trp 375	Thr	Ala	Gly	Ile	Thr 380	Ala	Glu	Ile	Met

WO 00/55350

1003

Туr 385	~	Trp	ser	Gln	Ser 390	Gln	Glu	Glu	Leu	Gln 395	Glu	Туr	Суѕ	Arg	His 400
His	Glu	Ile	Thr	Tyr 405	Val	Ala	Leu	Val	Ser 410	Asp	Lys	Glu	Gly	Ser 415	His
Val	Lys	Val	Lys 420	Ser	Phe	Glu	Lys	Glu 425	Arg	Gln	Thr	Glu	Lys 430	Arg	Val
Leu	Glu	Thr 435	Glu	Leu	Val	Asp	His 440	Val	Leu	Gln	Lys	Leu 445	Arg	Thr	Lys
Val	Thr 450	Asp	Glu	Arg	Asn	Gly 455	Arg	Glu	Ala	Ser	Asp 460	Asn	Leu	Ala	Val
Gln 465	Asn	Leu	Lys	Gly	Ser 470	Phe	Ser	Asn	Ala	Ser 475	Gly	Leu	Phe	Glu	Ile 480
His	Gly	Ala	Thr	Val 485	Val	Pro	Ile	Val	ser 490	Val	Leu	Ala	Pro	Glu 495	Lys
Leu	Ser	Ala	Ser 500	Thr	Arg	Arg	Arg	ту <i>г</i> 505	Glu	Thr	Gln	Val	Gln 510	Thr	Arg
Leu	Gln	Thr 515	Ser	Leu	Ala	Asn	Leu 520	His	Gln	Lys	Ser	Ser 525	Glu	Ile	Glu
Ile	Leu 530	Ala	Val	Asp	Leu	Pro 535	Lys	Glu	Thr	Ile	Leu 540	Gln	Phe	Leu	Ser
Leu 545	Glu	Trp	Asp		Asp 550	Glu	Gln	Ala	Phe	Asn 555	Thr	Thr	Val	Lys	Gln 560
Leu	Leu	Ser	Arg	Leu 565	Pro	Lys	Gln	Arg	Туг 570	Leu	Lys	Leu	Val	Cys 575	Asp
Glu	Ile	Tyr	Asn 580	Ile	Lys	Val	Glu	Lys 585	Lys	Val	Ser	Val	Leu 590	Phe	Leu
Tyr	Ser	Tyr	Arg	Asp	Asp	Tyr	Tyr	Arg	Ile	Leu	Phe				

600

<210> 1027

<211> 459

<212> PRT

<213> Homo sapiens

595

<220>

WO 00/55350

	21> 3														
	22> 23>	•	equal	ls ar	ny of	the	nat	ural	.ly c	occur	ring	L-a	mino	aci	ds
- 4.0			-		Ī.,				-						
)()> : : Sei		Gly	, Ile	a Asn	Thr	Lys	Phe	Thr	Ser	Lys	Glu	Pro	Ile	Phe
1		-	-				-		10					15	
Leu	Thi	Glr	Lev 20		n His	Phe	. Ser	Asn 25		к Хаа	Gln	Glu	Tyr 30	Lys	Ile
Asn	Sei	Arg 35		. Lev	ı Gln	Asn	11e 40		Asp	Ala	Gly	Phe 45	Gln	Met	Pro
Thr	Pro		Gln	Met	: Gln	Ala 55		Pro	Val	. Met	Leu 60		Gly	Arg	Glu
Leu 65		Ala	Ser	· Ala	Pro 70		Gly	Ser	Gly	Lys 75	Thr	Leu	Ala	Phe	Ser 80
Ile	Pro	Ile	Leu	Met 85	Gln	Leu	Lys	Gln	Pro 90		Asn	Lys	Gly	Phe 95	Arg
Ala	Leu	Ile	Ile 100		Pro	Thr	Arg	Glu 105	Leu	Ala	Ser	Gln	Ile 110	His	Arg
Glu	Leu	11e	-	Ile	Ser	Glu	Gly 120	Thr	Gly	Phe	Arg	Ile 125	His	Met	Ile
His	Lys 130		Ala	Val	Ala	Ala 135	Lys	Lys	Phe	Gly	Pro 140	Lys	Ser	Ser	Lys
Lys 145		Asp	Ile	Leu	Val 150	Thr	Thr	Pro	Asn	Arg 155	Leu	Ile	Tyr	Leu	Leu 160
Lys	Gln	Asp	Pro	Pro 165	Gly	Ile	Asp	Leu	Ala 170	Ser	Val	Glu	Trp	Leu 175	Val
Val	Asp	Glu	Ser 180	Asp	Lys	Leu	Phe	Glu 185	Asp	Gly	Lys	Thr	Gly 190	Phe	Arg
Asp	Gln	Leu 195	Ala	Ser	Ile	Phe	Leu 200	Ala	Cys	Thr	Ser	His 205	Lys	Val	Arg
Arg	Ala 210	Met	Phe	Ser	Ala	Thr 215	Phe	Ala	туг	Asp	Val 220	Glu	Gln	Trp	Cys
Lys 225	Leu	Asn	Leu	Asp	Asn 230	Val	Ile	Ser	Val	Ser 235	Ile	Gly	Ala	Arg	Asn 240
0	* 7 -	**- 1	Q1	m 1	**- 1	~1	~1~	C1	7	T	nha	*** 1	~ 3	C	0.7

1005

250 245 255 Thr Gly Lys Leu Leu Ala Val Arg Glu Leu Val Lys Lys Gly Phe Asn 265 Pro Pro Val Leu Val Phe Val Gln Ser Ile Glu Arg Ala Lys Glu Leu 280 Phe His Glu Leu Ile Tyr Glu Gly Ile Asn Val Asp Val Ile His Ala 295 300 Glu Arg Thr Gln Gln Gln Arg Asp Asn Thr Val His Ser Phe Arg Ala 310 315 Gly Lys Ile Trp Val Leu Ile Cys Thr Ala Leu Leu Ala Arg Gly Ile 330 Asp Phe Lys Gly Val Asn Leu Val Ile Asn Tyr Asp Phe Pro Thr Ser 345 Ser Val Glu Tyr Ile His Arg Ile Gly Arg Thr Gly Arg Ala Gly Asn 360 Lys Gly Lys Ala Ile Thr Phe Phe Thr Glu Asp Asp Lys Pro Leu Leu 375 Arg Ser Val Ala Asn Val Ile Gln Gln Ala Gly Cys Pro Val Pro Glu Tyr Ile Lys Gly Phe Gln Lys Leu Leu Ser Lys Gln Lys Lys Met 410 Ile Lys Lys Pro Leu Glu Arg Glu Ser Ile Ser Thr Thr Pro Lys Cys 425 Phe Leu Glu Lys Ala Lys Asp Lys Gln Lys Lys Val Thr Gly Gln Asn 435 440 Ser Lys Lys Val Ala Leu Glu Asp Lys Ser 450 455

<213> Homo sapiens
<400> 1028
Gln Arg Gly Phe Tyr Ala Asn Ala Leu Thr Ser Ala Leu Gly Asn Glu

<210> 1028 <211> 68 <212> PRT

Arg Val Thr Ser Ala Ser Ser Leu Ala Ser Phe Leu Val Leu Glu Arg Leu Thr Asn Val Cys His Ser His Lys Cys Phe Glu Leu Asp Leu Cys 40 Asp Leu Cys Phe Phe Ser Phe Ser Leu Glu Ser Glu Tyr His Cys Leu 55 Pro Pro Arg Ser 65 <210> 1029 <211> 215 <212> PRT <213> Homo sapiens <400> 1029 Tyr Pro Leu Thr Pro Ala Pro Ala Pro His Asp Pro Ser Pro Arg Ala 10 His Gly Arg Gly Asp Asp Val Thr Gln Ala Thr Ala Leu Thr Ser His Ile Thr Val Val Met Ala Ser Arg Gly His Val Asp Val Thr Lys Arg 40 Tyr Ser Asp Gly Val Val Gln Met Gln His Val Ala His Arg His Gly Glu Leu Gly Met Thr Ser His Arg Asp Ala Ala Thr Thr Ser Arg Ala 70 75 Met Ser Thr Ser His Ile Leu Met Ser His Arg Arg Gly Asp Gly Ile Thr Gln Thr Val Met Met Ser His Thr Asp Thr Val Thr Thr His Thr Met Thr Thr Pro Ile Asp Met Ala Pro Thr Ser His Ala Arg Met 120 Pro Phe His Thr His Phe Leu Pro Asn Ser His Leu Val Ser Arg Ser 130 135 Pro Asp Pro Gly Thr Arg Ala Lys Val Pro Thr Gly Ser His Pro Leu

150

Pro His Ser Pro Gly Pro Gln His Leu Pro Ser Ser Ser Phe Leu Ala 165 170 175

Ser Gln Pro Leu Pro His Pro Gln Cys Leu Asp Pro Glu Val Arg Thr 180 185 190

Gly Ser His Ser Pro Pro Leu Leu Glu Arg Glu Cys Phe Gln Asp Pro 195 200 205

Leu Gly Ala Leu Ser Arg Gly 210 215

<210> 1030

<211> 297

<212> PRT

<213> Homo sapiens

<400> 1030

Lys Val Arg Leu Gln Val Pro Val Arg Asn Ser Arg Val Asp Pro Arg

1 5 10 15

Val Arg Pro Arg Val Arg Pro Arg Val Arg Trp Thr Ala Ala Met Arg
20 25 30

Leu Thr Val Leu Cys Ala Val Cys Leu Leu Pro Gly Ser Leu Ala Leu 35 40 45

Pro Leu Pro Gln Glu Ala Gly Gly Met Ser Glu Leu Gln Trp Glu Gln 50 55 60

Ala Gln Asp Tyr Leu Lys Arg Phe Tyr Leu Tyr Asp Ser Glu Thr Lys
65 70 75 80

Asn Ala Asn Ser Leu Glu Ala Lys Leu Lys Glu Met Gln Lys Phe Phe 85 90 95

Gly Leu Pro Ile Thr Gly Met Leu Asn Ser Arg Val Ile Glu Ile Met
100 105 110

Gln Lys Pro Arg Cys Gly Val Pro Asp Val Ala Glu Tyr Ser Leu Phe 115 120 125

Pro Asn Ser Pro Lys Trp Thr Ser Lys Val Val Thr Tyr Arg Ile Val

Ser Tyr Thr Arg Asp Leu Pro His Ile Thr Val Asp Arg Leu Val Ser 145 150 155 160

Lys Ala Leu Asn Met Trp Gly Lys Glu Ile Pro Leu His Phe Arg Lys

1008

170 175 165 Val Val Trp Gly Thr Ala Asp Ile Met Ile Gly Phe Ala Arg Gly Ala 185 His Gly Asp Ser Tyr Pro Phe Asp Gly Pro Gly Asn Thr Leu Ala His 200 Ala Phe Ala Pro Gly Thr Gly Leu Gly Gly Asp Ala His Phe Asp Glu 215 Asp Glu Arg Trp Thr Asp Gly Ser Ser Leu Gly Ile Asn Phe Leu Tyr 230 235 Ala Ala Thr His Glu Leu Gly His Ser Leu Gly Met Gly His Ser Ser 245 250 Asp Pro Asn Ala Val Met Tyr Pro Thr Tyr Gly Asn Gly Asp Pro Gln 265 Asn Phe Lys Leu Ser Gln Asp Asp Ile Lys Gly Ile Gln Lys Leu Tyr 280 Gly Lys Arg Ser Asn Ser Arg Lys Lys 295 290 <210> 1031 <211> 571 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (44) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (81) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (484) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1031 Arg Val Arg Ser Lys Val Pro Arg Cys Val Asn Thr Gln Pro Gly Phe 5 10

His	Cys	Leu	Pro 20		Pro	Pro	Arg	Tyr 25	Arg	Gly	Asn	Gln	Pro 30	Val	Gly
Val	Gly	Leu 35	Glu	Ala	Ala	Lys	Thr 40	Glu	Lys	Gln	Xaa	Cys 45	Glu	Pro	Glu
Asn	Pro 50	Cys	Lys	Asp	Lys	Thr 55	His	Asn	Cys	His	Lys 60	His	Ala	Glu	Cys
Ile 65	Tyr	Leu	Gly	His	Phe 70	Ser	Asp	Pro	Met	Туг 75	Lys	Cys	Glu	Cys	Gln 80
Xaa	Gly	Tyr	Ala	Gly 85	Asp	Gly	Leu	Ile	Сув 90	Gly	Glu	Asp	Ser	Asp 95	Leu
Asp	Gly	Trp	Pro 100	Asn	Leu	Asn	Leu	Val 105	Cys	Ala	Thr	Asn	Ala 110	Thr	Tyr
		Ile 115					120					125			
Asp	Phe 130	Asp	Lys	Asp	Gly	Ile 135	Gly	Asp	Ala	Cys	Asp 140	Asp	Asp	Asp	Asp
Asn 145	Asp	Gly	Val	Thr	Asp 150	Glu	Lys	Asp	Asn	Cys 155	Gln	Leu	Leu	Phe	Asn 160
	Ī	Gln		165	-		_	-	170					175	
	-	Pro	180					185					190		
-		Gly 195	_		-		200					205			
	210	Arg	_		-	215					220				
225		Gly			230					235					240
		Pro	•	245		•		_	250	_			_	255	
		Asn	260					265					270		
Asp	Asn	Сув 275	Pro	Tyr	Ile	Ser	Asn 280	Ala	Asn	Gln	Ala	Asp 285	His	Asp	Arg

Asp	290		1 СТХ	Asp) Ата	295		PIC	ASE) Ast	300		a Asp	GIY	var
Pro 305	-	Asp	Arç	Asp	310	-	Arg	Leu	Val	. Phe 315		Pro	Asp	Gln	320
Asp	Leu	Asp	Gly	Asp 325	-	Arg	Gly	Asp	330		Lys	Asp	Asp	Phe 335	_
Asn	Asp	Asn	340		Asp	Ile	Asp	Asp 345		. Cys	Pro	Glu	Asn 350		Ala
Ile	Ser	Glu 355	Thr	Asp	Phe	Arg	360		Gln	Met	Val	Pro 365		Asp	Pro
Lys	Gly 370		Thr	Gln	Ile	Asp 375		Asn	Trp	Val	11e 380	_	His	Gln	Gly
Lys 385		Leu	Val	Gln	Thr 390	Ala	Asn	Ser	Asp	9ro 395	_	Ile	Ala	Val	Gly 400
Phe	Asp	Glu	Phe	Gly 405		Val	Asp	Phe	Ser 410	_	Thr	Phe	Tyr	Val 415	
Thr	Asp	Arg	Asp 420		Asp	Tyr	Ala	Gly 425	Phe	Val	Phe	Gly	Tyr 430	Gln	Ser
Ser	Ser	Arg 435	Phe	Tyr	Val	Val	Met 440	Trp	Lys	Gln	Val	Thr 445	Gln	Thr	Tyr
Trp	Glu 450	Asp	Gln	Pro	Thr	Arg 455	Ala	Tyr	Gly	Tyr	Ser 460	Gly	Val	Ser	Leu
Lys 465	Val	Val	Asn	Ser	Thr 470	Thr	Gly	Thr	Gly	Glu 475	His	Leu	Arg	Asn	Ala 480
Leu	Trp	His	Хаа	Gly 485	Asn	Thr	Pro	Gly	Gln 490	Val	Arg	Thr	Leu	Trp 495	His
Yab	Pro	Arg	Asn 500	Ile	Gly	Trp	Lys	Asp 505	Tyr	Thr	Ala	Tyr	Arg 510	Trp	His
Leu	Thr	His 515	Arg	Pro	Lys	Thr	Gly 520	Tyr	Ile	Arg	Val	Leu 525	Val	His	Glu
Gly	Lys 530	Gln	Val	Met	Ala	Asp 535	Ser	Gly	Pro	Ile	Tyr 540	Asp	Gln	Thr	Tyr
Ala 545	Gly	Gly	Arg	Leu	Gly 550	Leu	Phe	Val	Phe	ser 555	Gln	Glu	Met	Val	Tyr 560

Phe Ser Asp Leu Lys Tyr Glu Cys Arg Asp Ile 565 570

<210> 1032

<211> 114

<212> PRT

<213> Homo sapiens

<400> 1032

Gly Arg Gly Thr Ala Thr Phe Pro Thr Gly His Glu Phe Val Gly Pro 1 5 10 15

Cys Leu Gly Arg Ala Glu Ala Phe Trp Arg Ser Lys Met Gly Arg Lys 20 25 30

Asp Ala Ala Thr Ile Lys Leu Pro Val Asp Gln Tyr Arg Lys Gln Ile $35 \hspace{1cm} 40 \hspace{1cm} 45$

Gly Lys Gln Asp Tyr Lys Lys Thr Lys Pro Ile Leu Arg Ala Thr Lys 50 60

Leu Lys Ala Glu Ala Lys Lys Thr Ala Ile Gly Ile Lys Glu Val Gly 65

Leu Val Leu Ala Ala Ile Leu Ala Leu Leu Leu Ala Phe Tyr Ala Phe

Phe Tyr Leu Arg Leu Thr Thr Asp Val Asp Pro Asp Leu Asp Gln Asp 100 105 110

Glu Asp

<210> 1033

<211> 243

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (88)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (101)

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	-	-	Asp	Glu 5		Leu	Gln	ser	Leu 10	-	Phe	Arg	Arg	Arg 15	
Gly	Ala	Gln	Ala 20		Asp	Ala	Cys	Gly 25		Arg	Ala	Asp	Leu 30	_	Gly
Pro	Arg	Glu 35	Pro	Ala	Ala	Gly	Gly 40	-	Ala	Ala	Trp	His 45	-	Pro	Ala
Ala	Arg		Gln	Ser	Pro	Arg 55	Arg	Cys	His	Ala	Gly 60		His	Arg	Ser
Gln 65	_	His	Leu	Cys	Arg 70	Leu	Gly	Ala	Ala	Glu 75	-	Phe	Arg	Gly	Ile 80
Val	Ala	Leu	Leu	Ala 85	Ser	Arg	Xaa	Leu	Leu 90		Pro	Pro	Leu	His 95	Trp
Val	Leu	Leu	Ala 100	Xaa	Ala	Leu	Val	Asn 105	Leu	Leu	Leu	Ser	Val 110	Ala	Суз
Ser	Leu	Gly 115	Leu	Leu	Leu	Ala	Val 120	Ser	Leu	Thr	Val	Ala 125	Asn	Gly	Gly
Arg	Arg 130		Ile	Ala	Asp	Суs 135	His	Pro	Gly	Leu	Leu 140	Asp	Pro	Leu	Val
Pro 145	Leu	Asp	Glu	Gly	Pro 150	Gly	His	Thr	Asp	Cys 155	Pro	Phe	Asp	Pro	Thr 160
۱rg	Ile	Tyr	Asp	Thr 165	Ala	Leu	Ala	Leu	Trp 170	Ile	Pro	Ser	Leu	Leu 175	Met
Ser	Ala	Gly	Glu 180	Ala	Ala	Геп	Ser	Gly 185	туг	Cys	Cys	Val	Ala 190	Ala	Leu
hr	Leu	Arg 195	Gly	Val	Gly	Pro	Cys 200	Arg	Lys	Asp	Gly	Leu 205	Gln	Gly	Gln
eu	Glu 210	Glu	Met	Thr	Glu	Leu 215	Glu	Ser	Pro	Lys	Cys 220	Lys	Arg	Gln	Glu
sn 25	Glu	Gln	Leu	Leu	Asp 230	Gln	Asn	Gln	Glu	Ile 235	Arg	Ala	Ser	Gln	Arg 240
er	Tro	Val													

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<212> PRT
<213> Homo sapiens
<400> 1035
Ser Phe Ser Glu Met Ala Gly Val Ser Ala Cys Ile Lys Tyr Ser Met
1 5 10 15

<210> 1035 <211> 241

1014

Phe Thr Phe Asn Phe Leu Phe Trp Leu Cys Gly Ile Leu Ile Leu Ala Leu Ala Ile Trp Val Arg Val Ser Asn Asp Ser Gln Ala Ile Phe Gly 40 Ser Glu Asp Val Gly Ser Ser Ser Tyr Val Ala Val Asp Ile Leu Ile Ala Val Gly Ala Ile Ile Met Ile Leu Gly Phe Leu Gly Cys Cys Gly 70 75 Ala Ile Lys Glu Ser Arg Cys Met Leu Leu Leu Phe Phe Ile Gly Leu Leu Leu Ile Leu Leu Gln Val Ala Thr Gly Ile Leu Gly Ala Val Phe Lys Ser Lys Ser Asp Arg Ile Val Asn Glu Thr Leu Tyr Glu Asn 120 Thr Lys Leu Leu Ser Ala Thr Gly Glu Ser Glu Lys Gln Phe Gln Glu 135 Ala Ile Ile Val Phe Gln Glu Glu Phe Lys Cys Cys Gly Leu Val Asn Gly Ala Ala Asp Trp Gly Asn Asn Phe Gln His Tyr Pro Glu Leu Cys Ala Cys Leu Asp Lys Gln Arg Pro Cys Gln Ser Tyr Asn Gly Lys Gln 180 185 Val Tyr Lys Glu Thr Cys Ile Ser Phe Ile Lys Asp Phe Leu Ala Lys 200 Asn Leu Ile Ile Val Ile Gly Ile Ser Phe Gly Leu Ala Val Ile Glu 215 Ile Leu Gly Leu Val Phe Ser Met Val Leu Tyr Cys Gln Ile Gly Asn

235

230

Lys

225

<210> 1036

<211> 335

<212> PRT

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Pro	00> 1 Thi		a Gly	Arg		Glu	ı Glu	ı Ala	Lys 10		Ala	Ala	Ala	Ala 15	Ala
Sei	: Let	a Arç	g Gly 20		. Val	. Leu	Gly	Pro 25		Gly	Ala	Gly	Leu 30		Gly
Ala	a Arç	Ala 35		Gly	Leu	Leu	Cys 40		Ala	Arg	Pro	Gly 45		Leu	Pro
Let	Arg 50		Pro	Gln	Ala	Val 55		Leu	Ser	Ser	Lys 60		Gly	Leu	Ser
Arg		' Arg	Lys	Val	Met 70		Ser	Ala	Leu	G1y 75		Leu	Ala	Ala	Gly 80
Gly	' Ala	Gly	Leu	Ala 85		Ala	Leu	His	Ser 90		Val	Ser	Ala	Ser 95	Asp
Leu	Glu	Leu	His 100		Pro	Ser	Tyr	Pro 105		Ser	His	Arg	Gly 110	Leu	Leu
Ser	Ser	Leu 115	_	His	Thr	Ser	Ile 120	Arg	Arg	Gly	Phe	Gln 125	Val	Tyr	Lys
Gln	Val 130		Ala	Ser	Cys	His 135	Ser	Met	Asp	Phe	Val 140	Ala	Туг	Arg	His
Leu 145		Gly	Val	Cys	Tyr 150	Thr	Glu	Asp	Glu	Ala 155	Lys	Glu	Leu	Ala	Ala 160
Glu	Val	Glu	Val	Gln 165	Asp	Gly	Pro	Asn	Glu 170	Asp	Gly	Glu	Met	Phe 175	Met
Arg	Pro	Gly	Lys 180	Leu	Phe	Asp	Tyr	Phe 185	Pro	Lys	Pro	туг	Pro 190	Asn	Ser
Glu	Ala	Ala 195	Arg	Ala	Ala	Asn	Asn 200	Gly	Ala	Leu	Pro	Pro 205	Asp	Leu	Ser
Tyr	Ile 210	Val	Arg	Ala	Arg	ніs 215	Gly	Gly	Glu	Asp	Tyr 220	Val	Phe	Ser	Leu
Leu	Thr	Gly	Tyr	Cys	Glu	Pro	Pro	Thr	Gly	Val	ser	Leu	Arg	Glu	Gly

1016

225 230 235 240 Leu Tyr Phe Asn Pro Tyr Phe Pro Gly Gln Ala Ile Ala Met Ala Pro 250 Pro Ile Tyr Thr Asp Val Leu Glu Phe Asp Asp Gly Thr Pro Ala Thr 265 Met Ser Gln Ile Ala Lys Asp Val Cys Thr Phe Leu Arg Trp Ala Ser 280 Glu Pro Glu His Asp His Arg Lys Arg Met Gly Leu Lys Met Leu Met 295 Met Met Ala Leu Leu Val Pro Leu Val Tyr Thr Ile Lys Arg His Lys Trp Ser Val Leu Lys Ser Arg Lys Leu Ala Tyr Arg Pro Pro Lys 330 <210> 1037 <211> 511 <212> PRT <213> Homo sapiens His Gln Leu Gln Gly Pro Leu Pro Leu Arg Ala Leu Pro Trp His Ser Ser Arg Ser Arg Val Thr Cys Thr Arg Cys Phe Ser Trp Met His Pro 20 25 Ser Pro Met His Pro Leu Arg Ala Gly Ser Lys Ser Gln Gly Ser Arg Ser Pro Ala Pro Ser Pro Met Arg Ala Ala Asn Arg Ser His Ser Ala Gly Arg Thr Pro Gly Arg Thr Pro Gly Lys Ser Ser Ser Lys Val Gln Thr Thr Pro Ser Lys Pro Gly Gly Asp Arg Tyr Ile Pro His Arg Ser Ala Ala Gln Met Glu Val Ala Ser Phe Leu Leu Ser Lys Glu Asn Gln 105 Pro Glu Asn Ser Gln Thr Pro Thr Lys Lys Glu His Gln Lys Ala Trp 120

Ala	Leu 130	Asn	Leu	Asn	Gly	Phe 135	Asp	Val	GLu	Glu	140	Lys	ITe	ren	Arg
Leu 145	Ser	Gly	Lys	Pro	Gln 150	Asn	Ala	Pro	Glu	Gly 155	Tyr	Gln	Asn	Arg	Leu 160
Lys	Val	Leu	Tyr	Ser 165	Gln	Lys	Ala	Thr	Pro 170	Gly	Ser	Ser	Arg	Lys 175	Thr
Cys	Arg	Tyr	Ile 180	Pro	Ser	Leu	Pro	Asp 185	Arg	Ile	Leu	Asp	Ala 190	Pro	Glu
Ile	Arg	Asn 195	Asp	Tyr	Tyr	Leu	Asn 200	Leu	Val	Asp	Trp	Ser 205	Ser	Gly	Asn
	210	Ala				215					220				
225		Asp			230					235					240
		Ser		245					250					255	
		Ser	260					265					270		
		Asn 275					280					285			
Asn	Ser 290	Tyr	Ile	Leu	Ser	ser 295	Gly	Ser	Arg	Ser	Gly 300	His	Ile	His	His
305	-	Val			310					315					320
		Glu		325	"		-	-	330		_	-		335	
		Gly	340		_			345			-		350		
		Gly 355					360					365			
	370	Lys				375	•		_		380				-
hr 885	Gly	Gly	Gly	Thr	Ser 390	Asp	Arg	His	Ile	Arg 395	Ile	Trp	Asn	Val	Cys 400

Ser Gly Ala Cys Leu Ser Ala Val Asp Ala His Ser Gln Val Cys Ser Ile Leu Trp Ser Pro His Tyr Lys Glu Leu Ile Ser Gly His Gly Phe . 425 Ala Gln Asn Gln Leu Val Ile Trp Lys Tyr Pro Thr Met Ala Lys Val 440 Ala Glu Leu Lys Gly His Thr Ser Arg Val Leu Ser Leu Thr Met Ser 455 Pro Asp Gly Ala Thr Val Ala Ser Ala Ala Ala Asp Glu Thr Leu Arg Leu Trp Arg Cys Phe Glu Leu Asp Pro Ala Arg Arg Arg Glu Arg Glu Lys Ala Ser Ala Ala Lys Ser Ser Leu Ile His Gln Gly Ile Arg 505 <210> 1038 <211> 209 <212> PRT <213> Homo sapiens <400> 1038

Ard Gln Tyr Ard Ard Val Pro Asp Tle Thr Glu Cys Lys Glu Glu Asp

Arg Gln Tyr Arg Arg Val Pro Asp Ile Thr Glu Cys Lys Glu Glu Asp 100 105 110

Ile Met Cys Met Tyr Glu Ala Glu Met Gln Trp Lys Arg Asp Tyr Lys 120 115 Val Asp Gln Glu Ile Ile Asn Ile Met Gln Asp Arg Leu Lys Ala Cys 135 Gln Gln Arg Glu Gly Gln Asn Tyr Gln Gln Asn Cys Ile Lys Glu Val 150 Glu Gln Phe Thr Gln Val Ala Lys Ala Tyr Gln Asp Arg Tyr Gln Asp Leu Gly Ala Tyr Ser Ser Ala Arg Lys Cys Leu Ala Lys Gln Arg Gln 185 Arg Met Leu Gln Glu Arg Lys Ala Ala Lys Glu Ala Ala Ala Ala Thr 200 Ser <210> 1039 <211> 219 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (153) <223> Xaa equals any of the naturally occurring L-amino acids Leu Ala Ala Pro Asp Leu Ser Lys Pro Arg Gly Tyr His Trp Asp Thr Ser Asp Trp Met Pro Ser Val Pro Leu Pro Asp Ile Gln Glu Phe Pro Asn Tyr Glu Val Ile Asp Glu Gln Thr Pro Leu Tyr Ser Ala Asp Pro 40 Asn Ala Ile Asp Thr Asp Tyr Tyr Pro Gly Gly Tyr Asp Ile Glu Ser 55 Asp Phe Pro Pro Pro Pro Glu Asp Phe Pro Ala Ala Asp Glu Leu Pro Pro Leu Pro Pro Glu Phe Ser Asn Gln Phe Glu Ser Ile His Pro Pro 90

Arg Asp Met Pro Ala Ala Gly Ser Leu Gly Ser Ser Ser Arg Asn Arg . 100 105 Gln Arg Phe Asn Leu Asn Gln Tyr Leu Pro Asn Phe Tyr Pro Leu Asp 120 Met Ser Glu Pro Gln Thr Lys Gly Thr Gly Glu Asn Ser Thr Cys Arg 135 Glu Pro His Ala Pro Tyr Pro Pro Xaa Tyr Gln Arg His Phe Glu Ala 155 Pro Ala Val Glu Ser Met Pro Met Ser Val Tyr Ala Ser Thr Ala Ser Cys Ser Asp Val Ser Ala Cys Cys Glu Val Glu Ser Glu Val Met Met Ser Asp Tyr Glu Ser Gly Asp Asp Gly His Phe Glu Glu Val Thr Ile 200 Pro Pro Leu Asp Ser Gln Gln His Thr Glu Val 210 <210> 1040 <211> 178 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (11) <223> Xaa equals any of the naturally occurring L-amino acids Phe Asp Leu Pro Tyr Arg Ala Glu Phe Gly Xaa Pro Gly Pro Pro Leu Ser Ala Ala Cys Ser Trp Lys Phe Arg Leu Gly Cys Leu Leu Gly Ala 25 20 Met Glu Ser Asp Phe Tyr Leu Arg Tyr Tyr Val Gly His Lys Gly Lys

Phe Gly His Glu Phe Leu Glu Phe Glu Phe Arg Pro Asp Gly Lys Leu

Arg Tyr Ala Asn Asn Ser Asn Tyr Lys Asn Asp Val Met Ile Arg Lys

55

1021

65 70 75 80 Glu Ala Tyr Val His Lys Ser Val Met Glu Glu Leu Lys Arg Ile Ile 90 85 Asp Asp Ser Glu Ile Thr Lys Glu Asp Asp Ala Leu Trp Pro Pro Asp Arg Val Gly Arg Gln Glu Leu Glu Ile Val Ile Gly Asp Glu His 120 Ile Ser Phe Thr Thr Ser Lys Ile Gly Ser Leu Ile Asp Val Asn Gln 135 Ser Lys Asp Pro Glu Gly Leu Arg Val Phe Tyr Tyr Leu Val Gln Asp Leu Lys Cys Leu Val Phe Ser Leu Ile Gly Leu His Phe Lys Ile Lys 170 Pro Ile <210> 1041 <211> 121 <212> PRT <213> Homo sapiens <400> 1041 Leu Val Pro Asn Ser Ala Arg Ala Gly Ala Ser Tyr Ala Ala Ala Ala Val Thr Met Ala His Tyr Lys Ala Ala Asp Ser Lys Arg Glu Gln Phe 25 Arg Arg Tyr Leu Glu Lys Ser Gly Val Leu Asp Thr Leu Thr Lys Val Leu Val Ala Leu Tyr Glu Glu Pro Glu Lys Pro Asn Ser Ala Leu Asp Phe Leu Lys His His Leu Gly Ala Ala Thr Pro Glu Asn Pro Glu Ile Glu Leu Leu Arg Leu Glu Leu Ala Glu Met Lys Glu Lys Tyr Glu Ala Ile Val Glu Glu Asn Lys Lys Leu Lys Ala Lys Leu Ala Gln Tyr Glu 105 100

Pro Pro Gln Glu Glu Lys Arg Ala Glu 115 120

<210> 1042 <211> 253

<212> PRT

<213> Homo sapiens

<400> 1042

Val Asp Pro Arg Val Arg Pro Arg Ser Val Asn Gly Glu Leu Gln Lys 1 5 10 15

Ala Ile Asp Leu Phe Thr Asp Ala Ile Lys Leu Asn Pro Arg Leu Ala 20 25 30

Ile Leu Tyr Ala Lys Arg Ala Ser Val Phe Val Lys Leu Gln Lys Pro 35 40 45

Asn Ala Ala Ile Arg Asp Cys Asp Arg Ala Ile Glu Ile Asn Pro Asp 50 60

Ser Ala Gln Pro Tyr Lys Trp Arg Gly Lys Ala His Arg Leu Leu Gly
65 70 75 80

His Trp Glu Glu Ala Ala His Asp Leu Ala Leu Ala Cys Lys Leu Asp $85 \hspace{1.5cm} 90 \hspace{1.5cm} 95$

Tyr Asp Glu Asp Ala Ser Ala Met Leu Lys Glu Val Gln Pro Arg Ala 100 105 110

Gln Lys Ile Ala Glu His Arg Arg Lys Tyr Glu Arg Lys Arg Glu Glu 115 120 125

Arg Glu Ile Lys Glu Arg Ile Glu Arg Val Lys Lys Ala Arg Glu Glu

His Glu Arg Ala Gln Arg Glu Glu Glu Ala Arg Arg Gln Ser Gly Ala 145 150 155 160

Gln Tyr Gly Ser Phe Pro Gly Gly Phe Pro Gly Gly Met Pro Gly Asn 165 170 175

Phe Pro Gly Met Pro Gly Met Gly Gly Met Pro Gly Met Ala 180 185 190

Gly Met Pro Gly Leu Asn Glu Ile Leu Ser Asp Pro Glu Val Leu Ala 195 200 205

1023

Ala Met Gln Asp Pro Glu Val Met Val Ala Phe Gln Asp Val Ala Gln 210 215 220

Asn Pro Ala Asn Met Ser Lys Tyr Gln Ser Asn Pro Lys Val Met Asn 225 230 235 240

Leu Ile Ser Lys Leu Ser Ala Lys Phe Gly Gln Ala 245 250

<210> 1043

<211> 343

<212> PRT

<213> Homo sapiens

<400> 1043

Met Lys Thr Cys Gln Glu Glu Lys Leu Met Gly His Leu Gly Val Val 1 5 10 15

Leu Tyr Glu Tyr Leu Gly Glu Glu Tyr Pro Glu Val Leu Gly Ser Ile 20 25 30

Leu Gly Ala Leu Lys Ala Ile Val Asn Val Ile Gly Met His Lys Met 35 40 45

Thr Pro Pro Ile Lys Asp Leu Leu Pro Arg Leu Thr Pro Ile Leu Lys

Asn Arg His Glu Lys Val Gln Glu Asn Cys Ile Asp Leu Val Gly Arg 65 70 75 80

Ile Ala Asp Arg Gly Ala Glu Tyr Val Ser Ala Arg Glu Trp Met Arg 85 90 95

Ile Cys Phe Glu Leu Leu Glu Leu Leu Lys Ala His Lys Lys Ala Ile 100 105 110

Arg Arg Ala Thr Val Asn Thr Phe Gly Tyr Ile Ala Lys Ala Ile Gly
115 120 125

Pro His Asp Val Leu Ala Thr Leu Leu Asn Asn Leu Lys Val Gln Glu 130 135 140

Arg Gln Asn Arg Val Cys Thr Thr Val Ala Ile Ala Ile Val Ala Glu 145 150 155 160

Thr Cys Ser Pro Phe Thr Val Leu Pro Ala Leu Met Asn Glu Tyr Arg 165 170 175

Val Pro Glu Leu Asn Val Gln Asn Gly Val Leu Lys Ser Leu Ser Phe

1024

180 185 190 Leu Phe Glu Tyr Ile Gly Glu Met Gly Lys Asp Tyr Ile Tyr Ala Val 200 Thr Pro Leu Glu Asp Ala Leu Met Asp Arg Asp Leu Val His Arg 215 Gln Thr Ala Ser Ala Val Val Gln His Met Ser Leu Gly Val Tyr Gly 235 230 Phe Gly Cys Glu Asp Ser Leu Asn His Leu Leu Asn Tyr Val Trp Pro 250 Asn Val Phe Glu Thr Ser Pro His Val Ile Gln Ala Val Met Gly Ala Leu Glu Gly Leu Arg Val Ala Ile Gly Pro Cys Arg Met Leu Gln Tyr 280 Cys Leu Gln Gly Leu Phe His Pro Ala Arg Lys Val Arg Asp Val Tyr 295 Trp Lys Ile Tyr Asn Ser Ile Tyr Ile Gly Ser Gln Asp Ala Leu Ile 310 Ala His Tyr Pro Arg Ile Tyr Asn Asp Asp Lys Asn Thr Tyr Ile Arg Tyr Glu Leu Asp Tyr Ile Leu 340 <210> 1044 <211> 268 <212> PRT <213> Homo sapiens

Arg Gly Arg Xaa Asn Leu Glu Ser Thr Arg Val Arg Glu Leu Pro Gly 20 25 30

Gly	Ala	Met 35	Ser	Cys	Ile	Asn	Leu 40	Pro	Thr	Val	Leu	Pro 45	Gly	Ser	Pro
Ser	Lys 50	Thr	Arg	Gly	Gln	Ile 55	Gln	Val	Ile	Leu	Gly 60	Pro	Met	Phe	Ser
Gly 65	Lys	Ser	Thr	Glu	Leu 70	Met	Arg	Arg	Val	Arg 75	Arg	Phe	Gln	Ile	Ala 80
Gln	Tyr	Lys	Сұs	Leu 85	Val	Ile	Lys	Tyr	Ala 90	Lys	Asp	Thr	Arg	Tyr 95	Ser
Ser	Ser	Phe	Cys 100	Thr	His	Asp	Arg	Asn 105	Thr	Met	Glu	Ala	Leu 110	Pro	Ala
Cys	Leu	Leu 115	Arg	Asp	Val	Ala	Gln 120	Glu	Ala	Leu	Gly	Val 125	Ala	Val	Ile
Gly	Ile 130	Asp	Glu	Gly	Gln	Phe 135	Phe	Pro	Asp	Ile	Val 140	Glu	Phe	Cys	Glu
Ala 145	Met	Ala	Asn	Ala	Gly 150	Lys	Thr	Val	Ile	Val 155	Ala	Ala	Leu	Asp	Gly 160
Thr	Phe	Gln	Arg	Lys 165	Pro	Phe	Gly	Ala	Ile 170	Leu	Asn	Leu	Val	Pro 175	Leu
Ala	Glu	Ser	Val 180	Val	Lys	Leu	Thr	Ala 185	Val	Cys	Met	Glu	Суs 190	Phe	Arg
Glu	Ala	Ala 195	Tyr	Thr	Lys	Arg	Leu 200	Gly	Thr	Glu	Lys	Glu 205	Val	Glu	Val
Ile	Gly 210	Gly	Ala	Asp	Lys	Tyr 215	His	Ser	Val	Cys	Arg 220	Leu	Cys	Tyr	Phe
Lys 225	Lys	Ala	Ser	Gly	Gln 230	Pro	Ala	Gly	Pro	Asp 235	Asn	Lys	Glu	Asn	Cys 240
Pro	Val	Pro	Gly	Lys 245	Pro	Gly	Glu	Ala	Val 250	Ala	Ala	Arg	Lys	Leu 255	Phe
Ala	Pro	Gln	Gln 260	Ile	Leu	Gln	Cys	Ser 265	Pro	Ala	Asn				

<210> 1045

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1046

20

1026

<220> <221> SITE <222> (128) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1045 Pro Gly Gln Ser Arg Trp Gln Gly Pro Pro Leu Pro Leu Cys Gln Ala Gly Ser Ala Lys Ser Gly Glu Pro Gly Ala Gly Gly Lys Ala Gly Asp 2.5 Ser Pro Ala Leu Pro Pro Pro Leu Gly Ala Gln Gln Leu Leu Arg Lys Val Trp His Pro Trp Arg Gly Gly Ala Pro Gly Trp Ala Gly Ser Arg Trp Pro Gly Ala Trp Arg Cys Ala Ala Gly Ala Cys Met Ala Pro Arg Gly Thr Gln Ala Glu Glu Ser Pro Phe Val Gly Asn Pro Gly Asn Ile Thr Gly Ala Arg Gly Leu Thr Gly Thr Leu Arg Cys Gln Leu Gln 105 Val Gln Gly Glu Pro Pro Glu Val His Trp Leu Arg Asp Gly Gln Xaa Leu Glu Leu Ala Asp Ser Thr Gln Thr Gln Val 130 <210> 1046 <211> 416 <212> PRT <213> Homo sapiens

Ser Pro Ser Glu Arg Leu Gln Arg Gly Arg Glu Glu Gln Pro Ala Gly

Gly Gly Glu Ser Val Ser Ser Trp Glu Glu Gln Asn Arg Gly Gly

Ala Pro Ala Gly Ala Gly Gly Gly Pro Thr Met Ala Ile Arg Lys Lys 35 40 45

JGI	50	цуs	501	110		55	Dea	DCI		014	60	,,,			
His 65	Ala	Asp	Ile	Val	Ser 70	Cys	Val	Ala	Met	Val 75	Phe	Leu	Leu	Gly	Leu 80
Met	Phe	Glu	Ile	Thr 85	Ala	ràa	Ala	Ser	Ile 90	Ile	Phe	Val	Thr	Leu 95	Gln
Tyr	Asn	Val	Thr 100	Leu	Pro	Ala	Thr	Glu 105	Glu	Gln	Ala	Thr	Glu 110	Ser	Va1
Ser	Leu	туг 115	Tyr	Tyr	Gly	Ile	Lys 120	Asp	Leu	Ala	Thr	Val 125	Phe	Phe	Tyr
Met	Leu 130	Val	Ala	Ile	Ile	Ile 135	His	Ala	Val	Ile	Gln 140	Glu	Tyr	Met	Leu
Asp 145	Lys	Ile	Asn	Arg	Arg 150	Met	His	Phe	Ser	Lys 155	Thr	Lys	His	Ser	Lys 160
Phe	Asn	Glu	Ser	Gly 165	Gln	Leu	Ser	Ala	Phe 170	Tyr	Leu	Phe	Ala	Cys 175	Val
Trp	Gly	Thr	Phe 180	Ile	Leu	Ile	Ser	Glu 185	Asn	Tyr	Ile	Ser	Asp 190	Pro	Thr
Ile	Leu	Trp 195	Arg	Ala	Tyr	Pro	His 200	Asn	Leu	Met	Thr	Phe 205	Gln	Met	Lys
Phe	Phe 210	Tyr	Ile	ser	Gln	Leu 215	Ala	Tyr	Trp	Leu	His 220	Ala	Phe	Pro	Glu
Leu 225	Tyr	Phe	Gln	Lys	Thr 230	Lys	Lys	Gl u	Asp	Ile 235	Pro	Arg	Gln	Leu	Val 240
Tyr	Ile	Gly	Leu	Tyr 245	Leu	Phe	His	Ile	Ala 250	Gly	Ala	Tyr	Leu	Leu 255	Asn
Leu	Asn	His	Leu 260	Gly	Leu	Val	Leu	Leu 265	Val	Leu	His	туг	Phe 270	Val	Glu
Phe	Leu	Phe 275	His	Ile	Ser	Arg	Leu 280	Phe	Tyr	Phe	Ser	Asn 285	Glu	Lys	Tyr
Gln	Lys 290	Gly	Phe	Ser	Leu	Trp 295	Ala	Val	Leu	Phe	Val 300	Leu	Gly	Arg	Leu
Leu 305	Thr	Leu	Ile	Leu	Ser 310	Val	Leu	Thr	Val	Gly 315	Phe	Gly	Leu	Ala	Arg 320

1028

Ala Glu Asn Gln Lys Leu Asp Phe Ser Thr Gly Asn Phe Asn Val Leu 325 330 335

Ala Val Arg Ile Ala Val Leu Ala Ser Ile Cys Val Thr Gln Ala Phe 340 345 350

Met Met Trp Lys Phe Ile Asn Phe Gln Leu Arg Arg Trp Arg Glu His 355 360 365

Ser Ala Phe Gln Ala Pro Ala Val Lys Lys Lys Pro Thr Val Thr Lys 370 375 380

Gly Arg Ser Ser Lys Lys Gly Thr Glu Asn Gly Val Asn Gly Thr Leu 385 390 395 400

Thr Ser Asn Val Ala Asp Ser Pro Arg Asn Lys Lys Glu Lys Ser Ser 405 410 415

<210> 1047

<211> 466

<212> PRT

<213> Homo sapiens

<400> 1047

Pro Ala Ser Ser Gly Leu Leu Pro Leu Ser Arg Ser Asn Leu Tyr Ser 1 5 10 15

Gly Arg Thr Gly Ile Pro Arg Ala Pro Pro Ala Leu Ala Ala Leu Ala 20 25 30

Thr Ala Pro Gly Arg Arg Ala Pro Val His Thr Gly Ser Leu Leu Gly 35 40 45

Thr Asn Ser Ser Thr Met Gly Leu Ala Trp Gly Leu Gly Val Leu Phe 50 55 60

Leu Met His Val Cys Gly Thr Asn Arg Ile Pro Glu Ser Gly Gly Asp 65 70 75 80

Asn Ser Val Phe Asp Ile Phe Glu Leu Thr Gly Ala Ala Arg Lys Gly 85 90 95

Ser Gly Arg Arg Leu Val Lys Gly Pro Asp Pro Ser Ser Pro Ala Phe

Arg Ile Glu Asp Ala Asn Leu Ile Pro Pro Val Pro Asp Asp Lys Phe

120 115 125 Gln Asp Leu Val Asp Ala Val Arg Ala Glu Lys Gly Phe Leu Leu 135 Ala Ser Leu Arg Gln Met Lys Lys Thr Arg Gly Thr Leu Leu Ala Leu 150 155 Glu Arg Lys Asp His Ser Gly Gln Val Phe Ser Val Val Ser Asn Gly Lys Ala Gly Thr Leu Asp Leu Ser Leu Thr Val Gln Gly Lys Gln His Val Val Ser Val Glu Glu Ala Leu Leu Ala Thr Gly Gln Trp Lys Ser 200 Ile Thr Leu Phe Val Gln Glu Asp Arg Ala Gln Leu Tyr Ile Asp Cys 215 220 Glu Lys Met Glu Asn Ala Glu Leu Asp Val Pro Ile Gln Ser Val Phe 230 235 Thr Arg Asp Leu Ala Ser Ile Ala Arg Leu Arg Ile Ala Lys Gly Gly 250 Val Asn Asp Asn Phe Gln Gly Val Leu Gln Asn Val Arg Phe Val Phe 265 Gly Thr Thr Pro Glu Asp Ile Leu Arg Asn Lys Gly Cys Ser Ser Ser 280 Thr Ser Val Leu Leu Thr Leu Asp Asn Asn Val Val Asn Gly Ser Ser Pro Ala Ile Arg Thr Asn Tyr Ile Gly His Lys Thr Lys Asp Leu Gln 310 315 Ala Ile Cys Gly Ile Ser Cys Asp Glu Leu Ser Ser Met Val Leu Glu Leu Arg Gly Leu Arg Thr Ile Val Thr Thr Leu Gln Asp Ser Ile Arg 345 Lys Val Thr Glu Glu Asn Lys Glu Leu Ala Asn Glu Leu Arg Arg Pro Pro Leu Cys Tyr His Asn Gly Val Gln Tyr Arg Asn Asn Glu Glu Trp Thr Val Asp Ser Cys Thr Glu Cys His Cys Gln Asn Ser Val Thr Ile

1030

385 390 395 400 Cys Lys Lys Val Ser Cys Pro Ile Met Pro Cys Ser Asn Ala Thr Val 405 410 Pro Asp Gly Glu Cys Cys Pro Arg Cys Trp Pro Ser Asp Ser Ala Asp 425 Asp Gly Trp Ser Pro Trp Ser Glu Trp Thr Ser Cys Ser Thr Ser Cys 440 Gly Asn Gly Ile Gln Gln Arg Gly Arg Ser Cys Asp Ser Ala Gln Gln 455 Pro Met 465 <210> 1048 <211> 217 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (122) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (186) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (200) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1048 Asp Pro Arg Val Arg Gln Ser His Ile Ser Asp Thr Ser Val Val Val Lys Leu Asp Asn Ser Arg Asp Leu Asn Met Asp Cys Ile Ile Ala Glu 25 Ile Lys Ala Gln Tyr Asp Asp Ile Val Thr Arg Ser Arg Ala Glu Ala Glu Ser Trp Tyr Arg Ser Lys Cys Glu Glu Met Lys Ala Thr Val Ile 55

1031

Arg His Gly Glu Thr Leu Arg Arg Thr Lys Glu Glu Ile Asn Glu Leu Asn Arg Met Ile Gln Arg Leu Thr Ala Glu Val Glu Asn Ala Lys Cys 90 Gln Asn Ser Lys Leu Glu Ala Ala Val Ala Gln Ser Glu Gln Gln Gly 105 Glu Ala Ala Leu Ser Asp Ala Arg Cys Xaa Leu Ala Glu Leu Glu Gly 120 Ala Leu Gln Lys Ala Lys Gln Asp Met Ala Cys Leu Ile Arg Glu Tyr 135 Gln Glu Val Met Asn Ser Lys Leu Gly Leu Asp Ile Glu Ile Ala Thr 155 Tyr Arg Arg Leu Leu Glu Gly Glu Glu Gln Arg Leu Cys Glu Gly Ile 170 Gly Ala Val Asn Val Cys Val Ser Ser Xaa Arg Gly Gly Val Val Cys 180 185 Gly Asp Leu Cys Val Ser Gly Xaa Arg Pro Val Thr Ala Val Ser Ala 200 Ala Leu Arg Ala Thr Gly Thr Trp Arg 215 210

<210> 1049

<211> 406

<212> PRT

<213> Homo sapiens

<400> 1049

Gly Ser Ala Ala Ala Arg Tyr Leu Ser Ala Thr Trp Arg Asn Trp Ile 1 5 10 15

Ser Leu Pro Pro Ala Gly Leu Pro Ala Thr Ala Gly Leu Arg His Ser

Gly Ser Leu Met Ala Ala Thr Cys Glu Ile Ser Asn Ile Phe Ser Asn 35 40 45

Tyr Phe Ser Ala Met Tyr Ser Ser Glu Asp Ser Thr Leu Ala Ser Val 50 55 60

Pro 65		Ala	Ala	Thr	Phe 70		Ala	. Asp	Asp	75		. Leu	Thr	Leu	80
Asn	Pro	Gln	Met	Ser 85		Glu	Gly	Thr	90	_	Ala	Ser	Trp	Leu 95	_
Glu	Gln	Pro	Gln 100		Trp	Ser	Lys	105		Val	. Leu	Asp	110		ser
Tyr	Gln	Val 115		Lys	Asn	Lys	Tyr 120		Ala	Ser	Ala	11e		Phe	Ser
Arg	Cys 130		Met	Asp	Gly	Ala 135	Thr	Leu	Cys	Asn	Cys 140		Leu	Glu	Glu
Leu 145		Leu	Val	Phe	Gly 150		Leu	Gly	Asp	Gln 155		His	Ala	Gln	Leu 160
Arg	Asp	Leu	Thr	Ser 165		Ser	Ser	Asp	Glu 170		Ser	Trp	Ile	Ile 175	
Leu	Leu	Glu	Lys 180	_	Gly	Met	Ala	Phe 185		Glu	Ala	Leu	Asp 190	Pro	Gly
Pro	Phe	Asp 195		Gly	Ser	Pro	Phe 200	Ala	Gln	Glu	Leu	Leu 205	-	Asp	Gly
Gln	Gln 210	Ala	Ser	Pro	Tyr	His 215	Pro	Gly	Ser	Cys	Gly 220		Gly	Ala	Pro
Ser 225	Pro	Gly	Ser	Ser	Asp 230	Val	Ser	Thr	Ala	Gly 235	Thr	Gly	Ala	Ser	Arg 240
Ser	Ser	His	Ser	Ser 245	Asp	Ser	Gly	Gly	Ser 250	Asp	Val	Asp	Leu	Asp 255	Pro
Thr	Asp	Gly	Lys 260	Leu	Phe	Pro	Ser	Asp 265	Gly	Phe	Arg	Asp	Сув 270	Lys	Lys
Gly	Asp	Pro 275	Lys	His	Gly	Lys	Arg 280	Lys	Arg	Gly	Arg	Pro 285	Arg	Lys	Leu
Ser	Lys 290	Glu	Tyr	Trp	Asp	Cys 295	Leu	Glu	Gly	Lys	Lys 300	Ser	Lys	His	Ala
Pro 305	Arg	Gly	Thr	His	Leu 310	Trp	Glu	Phe	Ile	Arg 315	Asp	Ile	Leu	Ile	His 320
Pro	Glu	Leu	Asn		Gly		Met	Lys	_	Glu		Arg		Glu 335	-

Val Phe Lys Phe Leu Arg Ser Glu Ala Val Ala Gln Leu Trp Gly Gln 340 350

Lys Lys Lys Asn Ser Asn Met Thr Tyr Glu Lys Leu Ser Arg Ala Met 355 360 365

Arg Tyr Tyr Lys Arg Glu Ile Leu Glu Arg Val Asp Gly Arg Arg 370 375 380

Leu Val Tyr Lys Phe Gly Lys Asn Ser Ser Gly Trp Lys Glu Glu Glu 385 390 395 400

Val Leu Gln Ser Arg Asn 405

<210> 1050

<211> 251

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (53)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (86)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1050

Arg Pro Ala Leu Asp Thr Cys Cys Pro Phe Pro Ala Arg Ile Leu Gly
1 5 10 15

Ser Phe Pro Leu Ser Gln His Leu Gly Pro Ala Phe Asp Thr Thr Pro 20 25 30

Arg Leu Pro Thr Leu Arg Ala Trp Ser Leu Pro Gln Gly Pro Leu Ser 35 40 45

Trp Ala Met Ala Xaa Lys Gly Val Leu Gly Pro Gly Gln Leu Gly Ala 50 55 60

Val Ala Ile Leu Leu Tyr Leu Gly Leu Leu Arg Ser Gly Thr Gly Ala 65 70 75 80

Glu Gly Ala Glu Ala Xaa Cys Gly Val Ala Pro Gln Ala Arg Ile Thr 85 90 95

1034

Gly Gly Ser Ser Ala Val Ala Gly Gln Trp Pro Trp Gln Val Ser Ile 105 100 Thr Tyr Glu Gly Val His Val Cys Gly Gly Ser Leu Val Ser Glu Gln 120 Trp Val Leu Ser Ala Ala His Cys Phe Pro Ser Glu His His Lys Glu 130 135 Ala Tyr Glu Val Lys Leu Gly Ala His Gln Leu Asp Ser Tyr Ser Glu

Asp Ala Lys Val Ser Thr Leu Lys Asp Ile Ile Pro His Pro Ser Tyr 170

Leu Gln Glu Gly Ser Gln Gly Asp Ile Ala Leu Leu Gln Leu Ser Arg 185

Pro Ile Thr Phe Ser Arg Tyr Ile Arg Pro Ile Cys Leu Pro Ala Ala 200 195

Asn Ala Ser Phe Pro Asn Gly Leu His Cys Thr Val Thr Gly Trp Gly 215

His Val Ala Pro Ser Val Ser Leu Leu Thr Pro Lys Pro Leu Gln Gln 230

Leu Glu Val Pro Leu Ile Ser Arg Glu Thr Trp 245

<210> 1051

<211> 171

<212> PRT

<213> Homo sapiens

<400> 1051

His Tyr Arg Arg Tyr Ala Cys Arg Tyr Arg Ser Gly Ile Arg Gly Arg 10

Val Asp Ile Arg Arg Ser Ser Arg Arg Pro Arg Glu Pro Pro Gly 25

Pro Ser Arg Arg Arg Arg Arg Arg Pro Asp Pro Arg Thr Met Pro 40

Ser Glu Lys Thr Phe Lys Gln Arg Arg Thr Phe Glu Gln Arg Val Glu

Asp Val Arg Leu Ile Arg Glu Gln His Pro Thr Lys Ile Pro Val Ile

1035

75 65 70 80 Ile Glu Arg Tyr Lys Gly Glu Lys Gln Leu Pro Val Leu Asp Lys Thr 90 85 Lys Phe Leu Val Pro Asp His Val Asn Met Ser Glu Leu Ile Lys Ile 105 Ile Arg Arg Arg Leu Gln Leu Asn Ala Asn Gln Ala Phe Phe Leu Leu 120 115 Val Asn Gly His Ser Met Val Ser Val Ser Thr Pro Ile Ser Glu Val Tyr Glu Ser Glu Lys Asp Glu Asp Gly Phe Leu Tyr Met Val Tyr Ala 155 150 Ser Gln Glu Thr Phe Gly Met Lys Leu Ser Val 165 <210> 1052 <211> 189 <212> PRT <213> Homo sapiens <400> 1052 Gly Gly Pro Thr Cys Ser Ala Arg Cys Glu Pro Val Arg Pro Pro Pro 10 Ala Pro Glu Gln Pro Ala Ser Leu His Arg Leu Leu Ser Val Leu Ser 25 Pro Arg Ala Ala Ile Ala Val Met Leu Gly Ala Ala Leu Arg Arg Cys 40 Ala Val Ala Ala Thr Thr Arg Ala Asp Pro Arg Gly Leu Leu His Ser Ala Arg Thr Pro Gly Pro Ala Val Ala Ile Gln Ser Val Arg Cys Tyr Ser His Gly Ser Gln Glu Thr Asp Glu Glu Phe Asp Ala Arg Trp Val Thr Tyr Phe Asn Lys Pro Asp Ile Asp Ala Trp Glu Leu Arg Lys Gly .105 Ile Asn Thr Leu Val Thr Tyr Asp Met Val Pro Glu Pro Lys Ile Ile 120

Asp Ala Ala Leu Arg Ala Cys Arg Arg Leu Asn Asp Phe Ala Ser Thr Val Arg Ile Leu Glu Val Val Lys Asp Lys Ala Gly Pro His Lys Glu 150 155 Ile Tyr Pro Tyr Val Ile Gln Glu Leu Arg Pro Thr Leu Asn Glu Leu 170 Gly Ile Ser Thr Pro Glu Glu Leu Gly Leu Asp Lys Val 180 185 <210> 1053 <211> 315 <212> PRT <213> Homo sapiens <400> 1053 Arg His Ser Ala Ser Pro Arg Cys Arg Leu Pro Pro Thr Glu Pro Val Ser Gly Leu Arg Ala Ser Gly Glu Met Leu Leu Pro Leu Leu Leu Leu Pro Met Cys Trp Ala Val Glu Val Lys Arg Pro Arg Gly Val Ser 40 Leu Thr Asn His His Phe Tyr Asp Glu Ser Lys Pro Phe Thr Cys Leu 60 . 55 Asp Gly Ser Ala Thr Ile Pro Phe Asp Gln Val Asn Asp Asp Tyr Cys Asp Cys Lys Asp Gly Ser Asp Glu Pro Gly Thr Ala Ala Cys Pro Asn Gly Ser Phe His Cys Thr Asn Thr Gly Tyr Lys Pro Leu Tyr Ile Pro 100 105 Ser Asn Arg Val Asn Asp Gly Val Cys Asp Cys Cys Asp Gly Thr Asp Glu Tyr Asn Ser Gly Val Ile Cys Glu Asn Thr Cys Lys Glu Lys Gly Arg Lys Glu Arg Glu Ser Leu Gln Gln Met Ala Glu Val Thr Arg Glu

145

150

155

Gly	Phe	Arg	Leu	Lys 165	Lys	Ile	Leu	Ile	Glu 170	Asp	Trp	Lys	Lys	Ala 175	Arg
Glu	Glu	Lys	Gln 180	Lys	ŗys	Leu	Ile	Glu 185	Leu	Gln	Ala	Gly	Lys 190	Lys	Sei
Leu	Glu	Asp 195	Gln	Val	Glu	Met	Leu 200	Arg	Thr	Val	_	Glu 205	G1u	Ala	Glu
Lys	Pro 210	Glu	Arg	Glu	Ala	Lys 215	Glu	Gln	His	Gln	Lys 220	Leu	Trp	Glu	Glu
Gln 225	Leu	Ala	Ala	Ala	Lys 230	Ala	Gln	Gln	Glu	Gln 235	Glu	Leu	Ala	Ala	Asp 240
Ala	Phe	Lys	Glu	Leu 245	Asp	Asp	Asp	Met	Asp 250	Gly	Thr	Val	Ser	Val 255	Thr
Glu	Leu	Gln	Thr 260	His	Pro	Glu	Leu	Asp 265	Thr	Asp	Gly	Asp	Gly 270	Ala	Leu
Ser	Glu	Ala 275	Glu	Ala	Gln	Ala	Leu 280	Leu	Ser	Gly	Asp	Thr 285	Gln	Thr	Asp
Ala	Thr 290	Ser	Phe	Tyr	Asp	Arg 295	Val	Trp	Gly	Pro	Gly 300	Gly	Ala	Gly	Pro
His 305	Ser	Gln	Ala	Pro	Thr 310	Ala	Phe	Lys	Asp	Gly 315					
<21A	> 10	54					•						•		
	> 13														
	> PR	_													
		mo s	apie	ns											

<400> 1054

Val Trp Lys Val Ile Val Trp Ser His Ser Ser Leu Ile Thr Leu Leu 1 5 10 15

Gly Ile Leu Glu Glu Lys Gly Ser Lys Thr Tyr Thr His Thr Pro Thr $20 \\ 25 \\ 30$

Gln Ser Asn Ser Val Phe Lys Gln Ile Pro Arg Ile Leu Gly Pro Gly

Leu Asn Lys Ala Gly Lys Phe Pro Ser Leu Leu Thr His Asn Glu Asn 50 60

Met Val Ala Lys Val Asp Glu Val Lys Ser Thr Ile Lys Phe Gln Met

1038

75 70 65 Lys Lys Val Leu Cys Leu Ala Val Ala Val Gly His Val Lys Met Thr 85 90 Asp Asp Glu Leu Val Tyr Asn Ile His Leu Ala Val Asn Phe Leu Val 105 Ser Leu Leu Lys Lys Asn Trp Gln Asn Val Arg Ala Leu Tyr Ile Lys 120 115 Ser Thr Met Gly Lys Pro Gln Arg Leu Tyr <210> 1055 <211> 243 <212> PRT <213> Homo sapiens <400> 1055 Gly Thr Arg Glu Glu Ala Gly Val Asp Leu Val Ser Pro Thr Pro Leu Thr Pro Pro Asp Pro Gly Ala Ala Ser Ala Thr Ala Thr Ala Pro Ala 25 Pro Ala Ala Ala Arg Arg Gly Glu Ala Met Ala Lys Val Ser Val Leu 40 Asn Val Ala Val Leu Glu Asn Pro Ser Pro Phe His Ser Pro Phe Arg Phe Glu Ile Ser Phe Glu Cys Ser Glu Ala Leu Ala Asp Asp Leu Glu 70 Trp Lys Ile Ile Tyr Val Gly Ser Ala Glu Ser Glu Glu Phe Asp Gln Ile Leu Asp Ser Val Leu Val Gly Pro Val Pro Ala Gly Arg His Met Phe Val Phe Gln Ala Asp Ala Pro Asn Pro Ser Leu Ile Pro Glu Thr 120 Asp Ala Val Gly Val Thr Val Val Leu Ile Thr Cys Thr Tyr His Gly 135 Gln Glu Phe Ile Arg Val Gly Tyr Tyr Val Asn Asn Glu Tyr Leu Asn 155

 Pro Glu Leu Arg Glu Asn Pro Pro Met Lys Pro Asp Phe Ser Gln Leu 165
 170
 175

 Gln Arg Asn Ile Leu Ala Ser Asn Pro Arg Val Thr Arg Phe His Ile 180
 185
 190

Asn Trp Asp Asn Asn Met Asp Arg Leu Glu Ala Ile Glu Thr Gln Asp

200

Pro Ser Leu Gly Cys Gly Leu Pro Leu Asn Cys Thr Pro Ile Lys Gly
210 215 220

Leu Gly Leu Pro Gly Cys Ile Pro Gly Leu Leu Pro Glu Asn Ser Met 225 230 235 240

Asp Cys Ile

<210> 1056

<211> 211

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (8)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1056

His Glu Pro Arg Arg Leu Leu Xaa Asp Ala Glu Gly Pro Glu Glu Thr 1 5 10 15

Val Arg Leu Trp Pro Ala Ala Arg Ala Ala Met Asp Ala Ala Glu Val 20 25 30

Glu Phe Leu Ala Glu Lys Glu Leu Val Thr Ile Ile Pro Asn Phe Ser 35 40 45

Leu Asp Lys Ile Tyr Leu Ile Gly Gly Asp Leu Gly Pro Phe Asn Pro 50 60

Gly Leu Pro Val Glu Val Pro Leu Trp Leu Ala Ile Asn Leu Lys Gln 65 70 75 80

Arg Gln Lys Cys Arg Leu Leu Pro Pro Glu Trp Met Asp Val Glu Lys $85 \hspace{1cm} 90 \hspace{1cm} 95$

Leu Glu Lys Met Arg Asp His Glu Arg Lys Glu Glu Thr Phe Thr Pro

1040

100 105 110 Met Pro Ser Pro Tyr Tyr Met Glu Leu Thr Lys Leu Leu Leu Asn His 120 125 115 Ala Ser Asp Asn Ile Pro Lys Ala Asp Glu Ile Arg Thr Leu Val Lys 135 Asp Met Trp Asp Thr Arg Ile Ala Lys Leu Arg Val Ser Ala Asp Ser 155 145 150 Phe Val Arg Gln Gln Glu Ala His Ala Lys Leu Asp Asn Leu Thr Leu 170 Met Glu Ile Asn Thr Ser Gly Thr Phe Leu Thr Gln Ala Leu Asn His 180 185 Met Tyr Lys Leu Arg Thr Asn Leu Gln Pro Leu Glu Ser Thr Gln Ser 200 Gln Asp Phe 210 <210> 1057 <211> 407 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (343) <223> Xaa equals any of the naturally occurring L-amino acids Val Ile Leu Gly Ala Gly Leu Arg Asp Lys Asp Met Trp Ile Pro Val Val Gly Leu Pro Arg Arg Leu Arg Leu Ser Ala Leu Ala Gly Ala Gly 25 Arg Phe Cys Ile Leu Gly Ser Glu Ala Ala Thr Arg Lys His Leu Pro Ala Arg Asn His Cys Gly Leu Ser Asp Ser Ser Pro Gln Leu Trp Pro Glu Pro Asp Phe Arg Asn Pro Pro Arg Lys Ala Ser Lys Ala Ser Leu 65 70 75

Asp	Phe	Lys	Arg	Tyr 85	Val	Thr	Asp	Arg	Arg 90	Leu	Ala	Glu	Thr	Leu 95	Ala
Gln	Ile	Tyr	Leu 100	Gly	Lys	Pro	Ser	Arg 105	Pro	Pro	His	Leu	Leu 110	Leu	Glu
Суз	Asn	Pro 115	Gly	Pro	Gly	Ile	Leu 120	Thr	Gln	Ala	Leu	Leu 125		Ala	Gly
Ala	Lys	Val	Val	Ala	Leu	Glu 135	Ser	Asp	Lys	Thr	Phe 140	Ile	Pro	His	Leu
Glu 145	Ser	Leu	Gly	Lys	Asn 150	Leu	Asp	Gly	Lys	Leu 155	Arg	Val	Ile	His	Cys 160
Asp	Phe	Phe	Lys	Leu 165	Asp	Pro	Arg	Ser	Gly 170	Gly	Val	Ile	Lys	Pro 175	Pro
Ala	Met	Ser	Ser 180	Arg	Gly	Leu	Phe	Lys 185	Asn	Leu	Gly	Ile	Glu 190	Ala	Val
Pro	Trp	Thr 195	Ala	Asp	Ile	Pro	Leu 200	Lys	Val	Val	Gly	Met 205	Phe	Pro	Ser
Arg	Gly 210	Glu	Lys	Arg	Ala	Leu 215	Trp	Lys	Leu	Ala	Tyr 220	Asp	Leu	Tyr	Ser
Cys 225	Thr	Ser	Ile	Tyr	Lys 230	Phe	Gly	Arg	Ile	Glu 235	Val	Asn	Met	Phe	11e 240
Gly	Glu	Lys	Glu	Phe 245	Gln	Lys	Leu	Met	Ala 250	Asp	Pro	Gly	Asn	Pro 255	Asp
Leu	Tyr	His	Val 260	Leu	Ser	Val	Ile	Trp 265	Gln	Leu	Ala	Суз	Glu 270	Ile	Lys
Val	Leu	ніs 275	Met	Glu	Pro	Trp	Ser 280	Ser	Phe	Asp	Ile	Tyr 285	Thr	Arg	Lys
3ly	Pro 290	Leu	Glu	Asn	Pro	Lys 295	Arg	Arg	Glu	Leu	Leu 300	Asp	Gln	Leu	Gln
31n 305	Lys	Leu	Tyr	Leu	Ile 310	Gln	Met	Ile	Pro	Arg 315	Gln	Asn	Leu	Phe	Thr 320
ŗÀa	Asn	Leu	Thr	Pro 325	Met	Asn	Tyr	Asn	Ile 330	Phe	Phe	His	Leu	Leu 335	Lys
lis	Сув	Phe	Gly 340	Arg	Arg	Xaa	Ala	Thr 345	Val	Ile	Asp	His	Leu 350	Arg	Ser

1042

Leu Thr Pro Leu Asp Ala Arg Asp Ile Leu Met Gln Ile Gly Lys Gln 355 360 365

Glu Asp Glu Lys Val Val Asn Met His Pro Gln Asp Phe Lys Thr Leu 370 375 380

Phe Glu Thr Ile Glu Arg Ser Lys Asp Cys Ala Tyr Lys Trp Leu Tyr 385 390 395 400

Asp Glu Thr Leu Glu Asp Arg 405

<210> 1058

<211> 89

<212> PRT

<213> Homo sapiens

<400> 1058

Ser Ser Trp Val Gly Gly Ser Leu Arg Gln Ala Ala Thr Leu Glu Gly 1 5 10 15

Glu Gln Gly Ser Ala Val Ser Ala Ala Ser His Ala Arg Ser Asp Leu $20 \hspace{1.5cm} 25 \hspace{1.5cm} 30$

Ser Leu Gly Thr Pro Gln Glu Pro Glu Asp Ser Ser Gly Gln Cys Arg $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Trp Gly Val Gly Glu Ser Gly Arg Glu Ala Leu Arg Ala Pro Ser 50 55 60

Pro Thr Thr Asn Leu Ala Leu Val Val Ile Phe Arg Gln Asn Phe Val 65 70 75 80

Val Phe Pro Phe Tyr Asp Gly Phe

<210> 1059

<211> 457

<212> PRT

<213> Homo sapiens

<400> 1059

Gly Thr Arg Pro Ser Ser Cys Ser Gln Thr Glu Ala Gln Pro Pro Ser

Pro Val Ser Ile Thr Ser Ala Ala Ser Met Ser Asp Lys Leu Pro Tyr 20 25 30

WO 00/55350

Lys	Val	Ala 35	Asp	Ile	Gly	Leu	Ala 40		Trp	Gly	Arg	Lys 45		Leu	Asp
Ile	Ala 50		Asn	Glu	Met	Pro 55	Gly	Leu	Met	Arg	Met 60		Glu	Arg	Tyr
Ser 65		Ser	Lys	Pro	Leu 70		Gly	Ala	Arg	Ile 75		Gly	Cys	Leu	His 80
Met	Thr	Val	Glu	Thr 85		Val	Leu	Ile	Glu 90		Leu	Val	Thr	Leu 95	Gly
Ala	Glu	Val	Gln 100	_	Ser	Ser	Cys	Asn 105		Phe	Ser	Thr	Gln 110	Asp	His
Ala	Ala	Ala 115	Ala	Ile	Ala	Lys	Ala 120	Gly	Ile	Pro	Val	Туг 125	Ala	Trp	Lys
Gly	Glu 130		Asp	Glu	Glu	Туг 135	Leu	Trp	Cys	Ile	Glu 140		Thr	Leu	Tyr
Phe 145	Lys	Asp	Gly	Pro	Leu 150	Asn	Met	Ile	Leu	Asp 155	Asp	Gly	Gly	Asp	Leu 160
Thr	Asn	Leu	Ile	His 165	Thr	Lys	Tyr	Pro	Gln 170	Leu	Leu	Pro	Gly	Ile 175	Arg
Gly	Ile	Ser	Glu 180	Glu	Thr	Thr	Thr	Gly 185	Val	His	Asn	Leu	Туг 190	Lys	Met
Met	Ala	Asn 195	Gly	Ile	Leu	Lys	Val 200	Pro	Ala	Ile	Asn	Val 205	Asn	Asp	Ser
Val	Thr 210	Lys	Ser	Lys	Phe	Asp 215	Asn	Leu	Tyr	Gly	Cys 220	Arg	Glu	Ser	Leu
Ile 225	Asp	Gly	Ile	Lys	Arg 230	Ala	Thr	Asp	Val	Met 235	Ile	Ala	Gly	Lys	Val 240
Ala	Val	Val	Ala	Gly 245	Tyr	Gly	Asp	Val	Gly 250	Lys	Gly	Суз	Ala	Gln 255	Ala
Leu	Arg	Gly	Phe 260	Gly	Ala	Arg	Val	Ile 265	Ile	Thr	Glu	Ile	Asp 270	Pro	Ile
Asn	Ala	Leu 275	Gln	Ala	Ala	Met	Glu 280	Gly	Tyr	Glu	Val	Thr 285	Thr	Met	Asp
Glu	Ala 290	Cys	Gln	Glu	Gly	Asn 295	Ile	Phe	Val	Thr	Thr 300	Thr	Gly	Cys	Ile

1044

Asp Ile Ile Leu Gly Arg His Phe Glu Gln Met Lys Asp Asp Ala Ile Val Cys Asn Ile Gly His Phe Asp Val Glu Ile Asp Val Lys Trp Leu 325 330 Asn Glu Asn Ala Val Glu Lys Val Asn Ile Lys Pro Gln Val Asp Arg 345 Tyr Arg Leu Lys Asn Gly Arg Arg Ile Ile Leu Leu Ala Glu Gly Arg 360 355 Leu Val Asn Leu Gly Cys Ala Met Gly His Pro Ser Phe Val Met Ser Asn Ser Phe Thr Asn Gln Val Met Ala Gln Ile Glu Leu Trp Thr His 390 395 Pro Asp Lys Tyr Pro Val Gly Val His Phe Leu Pro Lys Lys Leu Asp 410 Glu Ala Val Ala Glu Ala His Leu Gly Lys Leu Asn Val Lys Leu Thr 425 Lys Leu Thr Glu Lys Gln Ala Gln Tyr Leu Gly Met Ser Cys Asp Gly 440 Pro Phe Lys Pro Asp His Tyr Arg Tyr 455 <210> 1060 <211> 511 <212> PRT <213> Homo sapiens <400> 1060 Glu Gly Val Met Ala Asp Gly Gln Val Ala Glu Leu Leu Leu Arg Arg Leu Glu Ala Ser Asp Gly Gly Leu Asp Ser Ala Glu Leu Ala Ala Glu

Leu Gly Met Glu His Gln Ala Val Val Gly Ala Val Lys Ser Leu Gln

Ala Leu Gly Glu Val Ile Glu Ala Glu Leu Arg Ser Thr Lys His Trp

Glu 65		Thr	Ala	ı Glu	Gly 70		Glu	Ile	: Ala	Arg 75		Gly	Ser	His	61: 80
Ala	Arg	val	Phe	Arç		Ile	Pro	Pro	Glu 90		Leu	ı Ala	Gln	Ser 95	
Leu	Met	: Arg	Leu 100		Ser	Gly	Lys	Val 105		Phe	Ser	Lys	110		. Sei
Asn	Lys	115		Arg	val	Asp	Lys 120		Ala	Ala	Asp	Gly 125		Arg	Val
Phe	Arg		. Val	. Asp	Ser	Met 135	Glu	Asp	Glu	Val	Gln 140	-	Arg	Leu	Glr
Leu 145		Arg	Gly	Gly	Gln 150		Glu	Lys	Leu	Gly 155		Lys	Glu	Arg	Ser 160
Glu	Leu	Arg	Lys	Arg 165	_	Leu	Leu	Ala	Glu 170		Thr	Leu	Lys	Thr 175	-
			180				Phe	185					190		
Thr	Glu	Leu 195		Pro	Glu	Met	11e 200	Ser	Ser	Gly	Ser	Trp 205	Arg	Asp	Arg
Pro	Phe 210	Lys	Pro	Tyr	Asn	Phe 215	Leu	Ala	His	Gly	Val 220	Leu	Pro	Asp	Ser
225					230		Lys			235			-		240
				245			Glu		250		_			255	
			260			-	Ala	265					270		
		275			_		Phe 280				7	285			
	290				-	295	Val				300				
305					310		Gly			315					320
Glu	Ala	Arg	Lys	Asn 325	Leu	Leu	Arg	Thr	His 330	Thr	Thr	Ser	Ala	Ser 335	Ala

Arg Ala Leu Tyr Arg Leu Ala Gln Lys Lys Pro Phe Thr Pro Val Lys 340 345 Tyr Phe Ser Ile Asp Arg Val Phe Arg Asn Glu Thr Leu Asp Ala Thr 360 His Leu Ala Glu Phe His Gln Ile Glu Gly Val Val Ala Asp His Gly 370 375 Leu Thr Leu Gly His Leu Met Gly Val Leu Arg Glu Phe Phe Thr Lys Leu Gly Ile Thr Gln Leu Arg Phe Lys Pro Ala Tyr Asn Pro Tyr Thr Glu Pro Ser Met Glu Val Phe Ser Tyr His Gln Gly Leu Lys Lys Trp 425 Val Glu Val Gly Asn Ser Gly Val Phe Arg Pro Glu Met Leu Leu Pro 440 Met Gly Leu Pro Glu Asn Val Ser Val Ile Ala Trp Gly Leu Ser Leu 455 Glu Arg Pro Thr Met Ile Lys Tyr Gly Ile Asn Asn Ile Arg Glu Leu Val Gly His Lys Val Asn Leu Gln Met Val Tyr Asp Ser Pro Leu Cys 490 Arg Leu Asp Ala Glu Pro Arg Pro Pro Pro Thr Gln Glu Ala Ala 505 500

<210> 1061

<211> 228

<212> PRT

<213> Homo sapiens

<400> 1061

Arg Ala Ala Ser Thr Pro Arg Ala Ala Pro Gly Ala Ala Leu Leu Ser

Pro Pro Gly Leu Arg Ala Ala Pro Ala Ala Leu Val Met Gly Glu Gly 20 25 30

Thr Cys Glu Lys Arg Arg Asp Ala Glu Tyr Gly Ala Ser Pro Glu Gln 35 40 45

Val Ala Asp Asn Gly Asp Asp His Ser Glu Gly Gly Leu Val Glu Asn

1047

55 . 60 50 His Val Asp Ser Thr Met Asn Met Leu Gly Gly Gly Ser Ala Gly 70 75 Arg Lys Pro Leu Lys Ser Gly Met Lys Glu Leu Ala Val Phe Arg Glu Lys Val Thr Glu Gln His Arg Gln Met Gly Lys Gly Lys His His Leu Gly Leu Glu Pro Lys Lys Leu Arg Pro Pro Pro Ala Arg Thr 120 Pro Cys Gln Glu Leu Asp Gln Val Leu Glu Arg Ile Ser Thr Met 135 Arg Leu Pro Asp Glu Arg Gly Pro Leu Glu His Leu Tyr Ser Leu His 155 Ile Pro Asn Cys Asp Lys His Gly Leu Tyr Asn Leu Lys Gln Cys Lys Met Ser Leu Asn Gly Gln Arg Gly Glu Cys Trp Cys Val Asn Pro Asn 185 Thr Gly Lys Leu Ile Gln Gly Ala Pro Thr Ile Arg Gly Asp Pro Glu 195 200 Cys His Leu Phe Tyr Asn Glu Gln Glu Ala Arg Gly Val His Thr 215 220 Gln Arg Met Gln 225 <210> 1062 <211> 324 <212> PRT <213> Homo sapiens <400> 1062 Pro Arg Val Met Ala Met Ala Thr Lys Gly Gly Thr Val Lys Ala Ala 10

Ser Gly Phe Asn Ala Met Glu Asp Ala Gln Thr Leu Arg Lys Ala Met

Lys Gly Leu Gly Thr Asp Glu Asp Ala Ile Ile Ser Val Leu Ala Tyr

Arg	Asn 50		Ala	Gln	Arg	G1n 55		Ile	Arg	, Thr	60		. Lys	ser	Thi
Ile 65		Arg	Asp	Leu	Ile 70		Asp	Leu	Lys	Ser 75		Leu	Ser	Gly	Asr 80
Phe	Glu	Gln	Val	11e 85	Val	Gly	Met	Met	Thr 90		Thr	Val	. Leu	Туг 95	
Val	Gln	Glu	Leu 100		Arg	Ala	Met	Lys 105		Ala	Gly	Thr	Asp 110		Gly
Cys	Leu	Ile 115		Ile	Leu	Ala	Ser 120	Arg	Thr	Pro	Glu	Glu 125		Arg	Arc
Ile	Ser 130		Thr	Tyr	Gln	Gln 135		Tyr	Gly	Arg	Ser 140	Leu	Glu	Asp	Asp
Ile 145		Ser	Asp	Thr	Ser 150	Phe	Met	Phe	Gln	Arg 155		Leu	Val	Ser	Leu 160
Ser	Ala	Gly	Gly	Arg 165	Asp	Glu	Gly	Asn	Туг 170		Asp	Asp	Ala	Leu 175	
Arg	Gln	Asp	Ala 180		Asp	Leu	Tyr	Glu 185	Ala	Gly	Glu	Lys	Lys 190	Trp	Gly
Thr	Asp	Glu 195	Val	Lys	Phe	Leu	Thr 200	Val	Leu	Cys	ser	Arg 205	Asn	Arg	Asn
His	Leu 210	Leu	His	Val	Phe	Asp 215	Glu	Tyr	Lys	Arg	11e 220	Ser	Gln	Lys	Asp
225					Lys 230					235				_	240
				245	Lys	_		•	250	_			-	255	
			260		Ser			265					270		
		275			Val		280					285			
	290				Arg	295	_	_	_		300	_			
Lys 305	Gly	Asp	Thr	Ser	Gly 310	Asp	Tyr	Arg	Lys	Val 315	Leu	Leu	Val	Leu	Cys 320

Gly Gly Asp Asp

115

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<210> 1063
<211> 355
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (37)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1063
Xaa Tyr Xaa Ile Pro Gly Ser Thr His Ala Ser Gly Lys Ile Leu Gly
Ser Gly Ile Ser Ser Ser Val Leu His Gly Met Val Phe Lys Lys
Glu Thr Glu Val Xaa Val Thr Ser Val Lys Asp Ala Lys Ile Ala Val
                            40
Tyr Ser Cys Pro Phe Asp Gly Met Ile Thr Glu Thr Lys Gly Thr Val
Leu Ile Lys Thr Ala Glu Glu Leu Met Asn Phe Ser Lys Gly Glu Glu
                                         75
Asn Leu Met Asp Ala Gln Val Lys Ala Ile Ala Asp Thr Gly Ala Asn
Val Val Val Thr Gly Gly Lys Val Ala Asp Met Ala Leu His Tyr Ala
            100
                               105
                                                   110
Asn Lys Tyr Asn Ile Met Leu Val Arg Leu Asn Ser Lys Trp Asp Leu
```

120

Arg Arg Leu Cys Lys Thr Val Gly Ala Thr Ala Leu Pro Arg Leu Thr 135 130 Pro Pro Val Leu Glu Glu Met Gly His Cys Asp Ser Val Tyr Leu Ser 150 Glu Val Gly Asp Thr Gln Val Val Phe Lys His Glu Lys Glu Asp Gly Ala Ile Ser Thr Ile Val Leu Arg Gly Ser Thr Asp Asn Leu Met 185 Asp Asp Ile Glu Arg Ala Val Asp Asp Gly Val Asn Thr Phe Lys Val 200 Leu Thr Arg Asp Lys Arg Leu Val Pro Gly Gly Gly Ala Thr Glu Ile 215 Glu Leu Ala Lys Gln Ile Thr Ser Tyr Gly Glu Thr Cys Pro Gly Leu 230 Glu Gln Tyr Ala Ile Lys Lys Phe Ala Glu Ala Phe Glu Ala Ile Pro Arg Ala Leu Ala Glu Asn Ser Gly Val Lys Ala Asn Glu Val Ile Ser 260 265 Lys Leu Tyr Ala Val His Gln Glu Gly Asn Lys Asn Val Gly Leu Asp 280 Ile Glu Ala Glu Val Pro Ala Val Lys Asp Met Leu Glu Ala Gly Ile 295 Leu Asp Thr Tyr Leu Gly Lys Tyr Trp Ala Ile Lys Leu Ala Thr Asn 310 315 Ala Ala Val Thr Val Leu Arg Val Asp Gln Ile Ile Met Ala Lys Pro Ala Gly Gly Pro Lys Pro Pro Ser Gly Lys Lys Asp Trp Asp Asp 345

<210> 1064

Gln Asn Asp

<211> 113

<212> PRT

<213> Homo sapiens

PCT/US00/05882 WO 00/55350

1051

Ser Pro Phe Thr Leu His Cys Cys His Ser Thr Leu Tyr Asp Gly Arg

Thr Gly Ser Ser Arg Glu Asn Cys Thr Val Thr Thr Val Phe Phe Thr

Leu Phe Gln Gly Ser Leu Ser Pro Asp Ile Glu Glu Ile Ser Phe Arg

Pro Glu Thr Gln Arg Pro His Ser Pro Val Ile Lys Pro Arg Phe His 55

Ser Gly Pro Arg Ser Gly Ala Trp Pro Leu Leu Phe Gly Ser His Trp 70

Glu Ala His Trp Pro Trp Ile Ile Ser Ser Cys Thr Pro Gly Val Leu

Pro Ala Cys Leu Leu Ser Trp Thr Ala Val Cys Lys Lys Val Thr Lys 105

Thr

<210> 1065

<211> 634

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (325)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1065

Val Gln Gly Phe Glu Ser Ala Thr Phe Leu Gly Tyr Phe Lys Ser Gly

Leu Lys Tyr Lys Lys Gly Gly Val Ala Ser Gly Phe Lys His Val Val

Pro Asn Glu Val Val Val Gln Arg Leu Phe Gln Val Lys Gly Arg Arg

Val Val Arg Ala Thr Glu Val Pro Val Ser Trp Glu Ser Phe Asn Asn 55

Gly 65		Cys	s Phe	e Ile	70) Lev	ı Gly	Asr	n Asr 75		e His	Glr	Trp	80 80
Gly	ser	. Ası	n Ser	Asn 85	-	Туг	Glu	ı Arç	J Let 90	-	: Ala	Th:	Glr.	val 95	
Lys	: Gly	/ Ile	2 Arg	_	Asn	Glu	a Arg	ser 105	-	Arg	, Ala	Arg	y Val 110		Val
Ser	Glu	115	_	Thr	Glu	Pro	120		Met	: Leu	Gln	125		Gly	Pro
Lys	130		Leu	Pro	Ala	Gly 135	Thr	Glu	Asp	Thr	Ala 140	_	Glu	Asp	Ala
Ala 145		Arg	Lys	Leu	Ala 150	_	Leu	Tyr	Lys	Val 155		Asn	Gly	Ala	Gly 160
Thr	Met	. Ser	Val	Ser 165		Val	Ala	Asp	Glu 170		Pro	Phe	Ala	Gln 175	
Ala	Leu	Lys	Ser 180		Asp	Cys	Phe	11e		Asp	His	Gly	Lys 190	_	Gly
Lys	Ile	Phe 195		Trp	Lys	Gly	Lys 200		Ala	Asn	Thr	Glu 205		Arg	Lys
Ala	Ala 210	Leu	Lys	Thr	Ala	Ser 215	Asp	Phe	Ile	Thr	Lys 220		Asp	Tyr	Pro
Lys 225	Gln	Thr	Gln	Val	Ser 230	Val	Leu	Pro	Glu	Gly 235	Gly	Glu	Thr	Pro	Leu 240
Phe	Lys	Gln	Phe	Phe 245	Lys	Asn	Trp	Arg	Asp 250	Pro	Asp	Gln	Thr	Asp 255	Gly
Leu	Gly	Leu	Ser 260	Tyr	Leu	Ser	ser	His 265	Ile	Ala	Asn	Val	Glu 270	Arg	Val
Pro	Phe	Asp 275	Ala	Ala	Thr	Leu	His 280	Thr	Ser	Thr	Ala	Met 285	Ala	Ala	Gln
His	Gly 290	Met	Asp	Asp	_	Gly 295	Thr	Gly	Gln	Lys	Gln 300	Ile	Trp	Arg	Ile
G1u 305	Gly	Ser	Asn	Lys	Val 310	Pro	Val	Asp	Pro	Ala 315	Thr	Tyr	Gly	Gln	Phe 320
Tyr	Gly	Gly	Asp	Xaa 325	Tyr	Ile	Ile	Leu	Tyr 330	Asn	Tyr	Arg	His	Gly 335	Gly

Arg Gln Gly Gln Ile Ile Tyr Asn Trp Gln Gly Ala Gln Ser Thr Gln Asp Glu Val Ala Ala Ser Ala Ile Leu Thr Ala Gln Leu Asp Glu Glu Leu Gly Gly Thr Pro Val Gln Ser Arg Val Val Gln Gly Lys Glu Pro Ala His Leu Met Ser Leu Phe Gly Gly Lys Pro Met Ile Ile Tyr Lys 390 395 Gly Gly Thr Ser Arg Glu Gly Gly Gln Thr Ala Pro Ala Ser Thr Arg 410 Leu Phe Gln Val Arg Ala Asn Ser Ala Gly Ala Thr Arg Ala Val Glu 425 Val Leu Pro Lys Ala Gly Ala Leu Asn Ser Asn Asp Ala Phe Val Leu 440 Lys Thr Pro Ser Ala Ala Tyr Leu Trp Val Gly Thr Gly Ala Ser Glu Ala Glu Lys Thr Gly Ala Gln Glu Leu Leu Arg Val Leu Arg Ala Gln 470 Pro Val Gln Val Ala Glu Gly Ser Glu Pro Asp Gly Phe Trp Glu Ala 490 Leu Gly Gly Lys Ala Ala Tyr Arg Thr Ser Pro Arg Leu Lys Asp Lys 500 505 Lys Met Asp Ala His Pro Pro Arg Leu Phe Ala Cys Ser Asn Lys Ile 520 Gly Arg Phe Val Ile Glu Glu Val Pro Gly Glu Leu Met Gln Glu Asp Leu Ala Thr Asp Asp Val Met Leu Leu Asp Thr Trp Asp Gln Val Phe Val Trp Val Gly Lys Asp Ser Gln Glu Glu Glu Lys Thr Glu Ala Leu Thr Ser Ala Lys Arg Tyr Ile Glu Thr Asp Pro Ala Asn Arg Asp Arg 585 Arg Thr Pro Ile Thr Val Val Lys Gln Gly Phe Glu Pro Pro Ser Phe

600

1054

Val Gly Trp Phe Leu Gly Trp Asp Asp Asp Tyr Trp Ser Val Asp Pro 610 620

Leu Asp Arg Ala Met Ala Glu Leu Ala Ala 625 630

<210> 1066

<211> 117

<212> PRT

<213> Homo sapiens

<400> 1066

Arg Ala Arg Gly Arg Cys Arg Arg Ser Pro Asp Gly Val Gly Ile Glu 1 5 10 15

Ala Pro Arg Lys Lys Val Lys Tyr Gln Glu Ile Gln Val Glu Pro
20 25 30

Tyr Tyr Asp Cys His Glu Cys Thr Glu Thr Phe Thr Ser Ser Thr Ala $35 \hspace{1cm} 40 \hspace{1cm} 45$

Phe Ser Glu His Leu Lys Thr His Ala Ser Met Ile Ile Phe Glu Pro 50 55 60

Ala Asn Ala Phe Gly Glu Cys Ser Gly Tyr Ile Glu Arg Ala Ser Thr
65 70 75 80

Ser Thr Gly Gly Ala Asn Gln Ala Asp Glu Lys Tyr Phe Lys Cys Asp 85 90 95

Val Cys Gly Gln Leu Phe Asn Asp Arg Leu Ser Leu Ala Arg His Gln
100 105 110

Asn Thr His Thr Gly 115

<210> 1067

<211> 192

<212> PRT

<213> Homo sapiens

<400> 1067

Pro Glu Gln Arg Gly Ser Ser Met Ala His Gly Pro Gly Ala Leu Met
1 10 15

Leu Lys Cys Val Val Gly Asp Gly Ala Val Gly Lys Thr Cys Leu $20 \hspace{1cm} 25 \hspace{1cm} 30$

Leu Met Ser Tyr Ala Asn Asp Ala Phe Pro Glu Ser Thr Cys Pro Pro 40 Ser Ser Thr Thr Thr Gln Glu Asp Tyr Asp Arg Leu Arg Pro Leu Ser 55 Tyr Pro Met Thr Asp Val Phe Leu Ile Cys Phe Ser Val Val Asn Pro Ala Ser Phe Gln Asn Val Lys Glu Glu Trp Val Pro Glu Leu Lys Glu Tyr Ala Pro Asn Val Pro Phe Leu Leu Ile Gly Thr Gln Ile Asp Leu 105 Arg Asp Asp Pro Lys Thr Leu Ala Arg Leu Asn Asp Met Lys Glu Lys 120 Pro Ile Cys Val Glu Gln Gly Gln Lys Leu Ala Lys Glu Ile Gly Ala 135 Cys Cys Tyr Val Glu Cys Ser Ala Leu Thr Gln Lys Gly Leu Lys Thr 150 155 Val Phe Asp Glu Ala Ile Ile Ala Ile Leu Thr Pro Lys Lys His Thr 170 Val Lys Lys Arg Ile Gly Ser Arg Cys Ile Asn Cys Cys Leu Ile Thr

<210> 1068

<211> 360

<212> PRT

<213> Homo sapiens

<400> 1068

Ser Arg Trp Ala Arg Arg Asp Pro Gln Glu Arg Arg Glu Arg Gly Thr
1 5 10 15

185

Arg Val Gln Ser Ser Gly Thr Trp Ile Gly Ala Gly Ala Met Gly Gly 20 25 30

Glu Glu Glu Glu Arg Phe Asp Gly Met Leu Leu Ala Met Ala Glu 35 40 45

Gln	His 50		ı Gly	7 Gly	v Val	. Gln 55		. Leu	ı Val	L Asn	Thr 60		≥ Phe	e Ser	Phe
Leu 65	_	Arç	J Lys	: Thr	Asp 70		Phe	: Ile	: Gly	7 Gly 75		Glu	ı Gly	Met	: Ala
Glu	Lys	Leu	ı Ile	Thr 85		Thr	Phe	s Ser	Ніs 90	His	Asn	Glr	ı Leu	Ala 95	
Lys	Thr	Arg	100		Lys	Arg	Ala	Arg 105		Glu	Ala	Glu	Arg 110	_	Gl:
Lys	Ala	Glu 115	-	Ala	Ala	Arg	Leu 120		Lys	Glu	Ala	Lys 125		Glu	Thi
Ser	Gly 130		Gln	Ile	Lys	Glu 135		Thr	Asp	Glu	Glu 140	Ala	Glu	Arg	Let
Gln 145		Glu	Ile	Asp	Gln 150	Lys	Lys	Asp	Ala	Glu 155		His	Glu	Ala	Glr 160
Leu	Lys	Asn	Gly	Ser 165		Asp	Ser	Pro	Gly 170	Lys	Gln	Asp	Thr	Glu 175	
Asp	Glu	Glu	Glu 180	_	Glu	Lys	Asp	Lys 185	Gly	Lys	Leu	Lys	Pro 190	Asn	Leu
Gly	Asn	Gly 195		Asp	Leu	Pro	Asn 200	Туr	Arg	Trp	Thr	Gln 205		Leu	Ser
Glu	Leu 210	Asp	Leu	Ala	Val	Pro 215	Phe	Cys	Val	Asn	Phe 220	Arg	Leu	Lys	Gly
Lys 225	Asp	Met	Val	Val	Asp 230	Ile	Gln	Arg	Arg	His 235	Leu	Arg	Val	Gly	Leu 240
Lys	Gly	Gln	Pro	Ala 245	Ile	Ile	Asp	Gly	Glu 250	Leu	Tyr	Asn	Glu	Val 255	Lys
Val	Glu	Glu	Ser 260	Ser	Trp	Leu	Ile	Glu 265	Asp	Gly	Lys	Val	Val 270	Thr	Val
His	Leu	Glu 275	Lys	Ile	Asn	Lys	Met 280	Glu	Trp	Trp	Ser	Arg 285	Leu	Val	Ser
Ser	Asp 290	Pro	Glu	Ile	Asn	Thr 295	Lys	Lys	Ile	Asn	Pro 300	Glu	Asn	Ser	Lys
Leu 305	Ser	Asp	Leu		Ser	Glu	Thr	Arg	Ser	Met	Val	Glu	Lys	Met	Met

Tyr Asp Gln Arg Gln Lys Ser Met Gly Leu Pro Thr Ser Asp Glu Gln 325 330 335

Lys Lys Gln Glu Ile Leu Lys Lys Phe Met Asp Gln His Pro Glu Met 340 345 350

Asp Phe Ser Lys Ala Lys Phe Asn 355 360

<210> 1069

<211> 174

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (52)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1069

Val Trp Leu Ser Trp Asp Gln Glu Lys Ile Pro Val Leu Asp Gln Glu
1 5 10 15

Ala Ala Asp Gly Ser Ser Thr Leu Gly Gly Gly Ala Gly Thr Met Gly 20 25 30

Leu Ser Ala Arg Tyr Gly Pro Gln Phe Thr Leu Gln His Val Pro Asp
35 40 45

Tyr Arg Gln Xaa Val Tyr Ile Pro Gly Ser Asn Ala Thr Leu Thr Asn 50 55 60

Ala Ala Gly Lys Arg Gly Trp Gln Gly Pro Ser Arg Trp Gln Trp Gln 65 70 75 80

Gln Glu Glu Val Gly Gln Glu Glu Glu Val Thr Trp Arg Pro Gly 85 90 95

Gln Glu Pro Gln Gly Gly Leu Ser Pro Thr Ser Pro Ala Ser Pro Tyr
100 105 110

Leu His Pro Gly Leu Arg Val Ser Gly Leu Thr Pro Arg Ile Leu Val 115 120 125

Gly Ala Lys Ala Met Leu Pro Leu Gly Asn Arg Asn Lys Cys Pro Val 130 135 140

Ser Thr Tyr Pro Phe Pro Pro Arg Gly Leu Asn Met Gln Lys Gln Phe 145 150 155 160

Arg Trp Glu Pro Pro Ser Asn Gln Leu Leu Tyr Pro Trp Gly 165 170

<210> 1070

<211> 445

<212> PRT

<213> Homo sapiens

<400> 1070

Pro Arg Gly Leu Thr Gly Leu Trp Arg Ser Ser Leu Pro Ile Arg Lys

1 10 15

Leu Gln Leu Pro Pro Asp Ala Leu Lys Met Ala Thr Ser Leu Gly Ser 20 25 30

Asn Thr Tyr Asn Arg Gln Asn Trp Glu Asp Ala Asp Phe Pro Ile Leu
35 40 45

Cys Gln Thr Cys Leu Gly Glu Asn Pro Tyr Ile Arg Met Thr Lys Glu 50 55 60

Lys Tyr Gly Lys Glu Cys Lys Ile Cys Ala Arg Pro Phe Thr Val Phe 65 70 75 80

Arg Trp Cys Pro Gly Val Arg Met Arg Phe Lys Lys Thr Glu Val Cys
85 90 95

Gln Thr Cys Ser Lys Leu Lys Asn Val Cys Gln Thr Cys Leu Leu Asp

Leu Glu Tyr Gly Leu Pro Ile Gln Val Arg Asp Ala Gly Leu Ser Phe 115 120 125

Lys Asp Asp Met Pro Lys Ser Asp Val Asn Lys Glu Tyr Tyr Thr Gln 130 135 140

Asn Met Glu Arg Glu Ile Ser Asn Ser Asp Gly Thr Arg Pro Val Gly 145 150 155 160

Met Leu Gly Lys Ala Thr Ser Thr Ser Asp Met Leu Leu Lys Leu Ala 165 170 175

Arg Thr Thr Pro Tyr Tyr Lys Arg Asn Arg Pro His Ile Cys Ser Phe 180 185 190

Trp Val Lys Gly Glu Cys Lys Arg Gly Glu Glu Cys Pro Tyr Arg His 195 200 205

Glu	Lys 210		Thr	Asp	Pro	Asp 215	-	Pro	Leu	Ala	Asp 220	Gln	Asn	Ile	Lys
Asp 225	_	Tyr	Туг	Gly	11e 230		Asp	Pro	Val	Ala 235	Asp	Lys	Leu	Leu	Lys 240
Arg	Ala	Ser	Thr	Met 245	Pro	Arg	Leu	Asp	Pro 250	Pro	Glu	Asp	Lys	Thr 255	Ile
Thr	Thr	Leu	Туг 260		Gly	Gly	Leu	Gly 265	_	Thr	Ile	Thr	Glu 270	Thr	Asp
Leu	Arg	Asn 275		Phe	Tyr	Gln	Phe 280	Gly	Glu	Ile	Arg	Thr 285	Ile	Thr	Val
Val	Gln 290	Arg	Gln	Gln	Суѕ	Ala 295	Phe	Ile	Gln	Phe	Ala 300	Thr	Arg	Gln	Ala
Ala 305	Glu	Val	Ala	Ala	Glu 310	Lys	Ser	Phe	Asn	Lys 315	Leu	Ile	Val	Asn	Gly 320
Arg	Arg	Leu	Asn	Val 325	Lys	Trp	Gly	Arg	Ser 330	Gln	Ala	Ala	Arg	Gly 335	Lys
Glu	Lys	Glu	Lys 340	Asp	Gly	Thr	Thr	Asp 345	Ser	Gly	Ile	Lys	Leu 350	Glu	Pro
Val	Pro	Gly 355	Leu	Pro	Gly	Ala	Leu 360	Pro	Pro	Pro	Pro	Ala 365	Ala	Glu	Glu
Glu	Ala 370	Ser	Ala	Asn	Tyr	Phe 375	Asn	Leu	Pro	Pro	Ser 380	Gly	Pro	Pro	Ala
Val 385	Val	Asn	Ile	Ala	Leu 390	Pro	Pro	Pro	Pro	Gly 395	Ile	Ala	Pro	Pro	Pro 400
Pro	Pro	Gly	Phe	Gly 405	Pro	His	Met	Phe	His 410	Pro	Met	Gly	Pro	Pro 415	Pro
Pro	Phe	Met	Arg 420	Ala	Pro	Gly	Pro	Ile 425 _.		Tyr	Pro	Ser	Gln 430	Asp	Pro
Gln	Arg	Met	Gly	Ala	His	Ala	Gly	Lys	His	Ser	Ser	Pro			

<210> 1071

435

<211> 346

<212> PRT

<213> Homo sapiens

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<220>
<221> SITE
<222> (286)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (287)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (291)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (294)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1071
Trp Ser Arg Leu Cys Leu Leu Lys Gln Tyr Leu Phe Thr Met Lys Leu
                                     10
Gln Ser Pro Glu Phe Gln Ser Leu Phe Thr Glu Gly Leu Lys Ser Leu
                                 25
Thr Glu Leu Phe Val Lys Glu Asn His Glu Leu Arg Ile Ala Gly Gly
Ala Val Arg Asp Leu Leu Asn Gly Val Lys Pro Gln Asp Ile Asp Phe
Ala Thr Thr Ala Thr Pro Thr Gln Met Lys Glu Met Phe Gln Ser Ala
Gly Ile Arg Met Ile Asn Asn Arg Gly Glu Lys His Gly Thr Ile Thr
                                     90
Ala Arg Leu His Glu Glu Asn Phe Glu Ile Thr Thr Leu Arg Ile Asp
                                105
Val Thr Thr Asp Gly Arg His Ala Glu Val Glu Phe Thr Thr Asp Trp
                           120
Gln Lys Asp Ala Glu Arg Arg Asp Leu Thr Ile Asn Ser Met Phe Leu
Gly Phe Asp Gly Thr Leu Phe Asp Tyr Phe Asn Gly Tyr Glu Asp Leu
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Lys Asn Lys Lys Val Arg Phe Val Gly His Ala Lys Gln Arg Ile Gln Glu Asp Tyr Leu Arg Ile Leu Arg Tyr Phe Arg Phe Tyr Gly Arg Ile 180 185 Val Asp Lys Pro Gly Asp His Asp Pro Glu Thr Leu Glu Ala Ile Ala 200 Glu Asn Ala Lys Gly Leu Ala Gly Ile Ser Gly Glu Arg Ile Trp Val 215 Glu Leu Lys Lys Ile Leu Val Gly Asn His Val Asn His Leu Ile His 230 235 Leu Ile Tyr Asp Leu Asp Val Ala Pro Tyr Ile Gly Leu Pro Ala Asn 250 Ala Ser Leu Glu Glu Phe Asp Lys Val Ser Lys Asn Val Asp Gly Phe 265 Ser Pro Lys Pro Val Thr Leu Leu Ala Ser Leu Phe Lys Xaa Xaa Asp 280 Asp Val Xaa Lys Leu Xaa Leu Arg Leu Lys Ile Ala Lys Glu Glu Lys Asn Leu Gly Leu Phe Ile Val Lys Asn Arg Lys Asp Leu Ile Lys Ala Thr Asp Ser Ser Asp Pro Leu Lys Pro Tyr Gln Asp Phe Ile Ile Asp 325 330 Ser Arg Glu Pro Asp Ala His Ser Cys Met

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<210> 1072
<211> 404
<212> PRT
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<213> Homo sapiens

<220> <221> SITE

<222> (77)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<pre><222> (81) <223> Xaa equals any of the naturally occurring L-amino acids</pre>															
<22	23> }	Kaa €	equa I	s an	y of	the	nat	ural	ly c	occur	ring	L-a	mino	aci	.ds
	0> 1		. T			. 3		. mh						. 3	
1	-	, sei	. re	ASI 5		. ASP	neu	THE	10	_	Met	Leu	. Arg	15	Leu
Leu	Glu	ı Arç	Pro 20	_	Thr	Leu	Ala	Leu 25		Val	Gly	Ser	Gln 30		Ala
Val	. Met	Met 35	_	Leu	Ser	Leu	Gly 40	_	Phe	e Arg	Ser	Leu 45		Ala	Leu
Phe	: Gly 50	_	Asp	Gln	Gly	Pro 55		Phe	Asp	туг	Ser 60	His	Pro	Arg	Asp
Val 65		Ser	Asn	Leu	Ser 70	His	Leu	Pro	Gly	Ala 75	Pro	Xaa	Gly	Pro	Pro 80
Xaa	Pro	Gln	Gly	Leu 85		Tyr	Cys	Pro	Glu 90	_	Ser	Pro	Leu	Leu 95	Val
Gly	Pro	Val	Ser 100		Ser	Phe	Ser	Pro 105	Val	Pro	Ser	Leu	Ala 110	Glu	Ile
Val	Glu	Arg 115		Pro	Arg	Val	Glu 120	Pro	Gly	Gly	Arg	Туг 125	Arg	Pro	Ala
Gly	Суs 130		Pro	Arg	Ser	Arg 135	Thr	Ala	Ile	Ile	Val 140	Pro	His	Arg	Ala
Arg 145		His	His	Leu	Arg 150	Leu	Leu	Leu	Tyr	His 155	Leu	His	Pro	Phe	Leu 160
Gln	Arg	Gln	Gln	Leu 165	Ala	Tyr	Gly	Ile	Tyr 170	Val	Ile	His	Gln	Ala 175	Gly
Asn	Gly	Thr	Phe 180	Asn	Arg	Ala	Lys	Leu 185	Leu	Asn	Val	Gly	Val 190	Arg	Glu
Ala	Leu	Arg 195	Asp	Glu	Glu	Trp	Asp 200	Cys	Leu	Phe	Leu	His 205	Asp	Val	Asp
Leu	Leu 210	Pro	Glu	Asn	Asp	His 215	Asn	Leu	Tyr	Val	Cys 220	Asp	Pro	Arg	Gly
Pro 225	Arg	His	Val	Ala	Val 230	Ala	Met	Asn	Lys	Phe 235	Gly	Tyr	Ser	Leu	Pro 240
Tyr	Pro	Gln	Tyr	Phe 245	Gly	Gly	Val		Ala 250		Thr	Pro	Asp	Gln 255	Tyr

Leu Lys Met Asn Gly Phe Pro Asn Glu Tyr Trp Gly Trp Gly Glu Asp Asp Asp Ile Ala Thr Arg Val Arg Leu Ala Gly Met Lys Ile Ser 280 Arg Pro Pro Thr Ser Val Gly His Tyr Lys Met Val Lys His Arg Gly 295 Asp Lys Gly Asn Glu Glu Asn Pro His Arg Phe Asp Leu Leu Val Arg 310 Thr Gln Asn Ser Trp Thr Gln Asp Gly Met Asn Ser Leu Thr Tyr Gln 330 Leu Leu Ala Arg Glu Leu Gly Pro Leu Tyr Thr Asn Ile Thr Ala Asp Ile Gly Thr Asp Pro Arg Gly Pro Arg Ala Pro Ser Gly Pro Arg Tyr 360 Pro Pro Gly Ser Ser Gln Ala Phe Arg Gln Glu Met Leu Gln Arg Arg 375 Pro Pro Ala Arg Pro Gly Pro Leu Ser Thr Ala Asn His Thr Ala Leu 390 395 Arg Gly Ser His <210> 1073

<211> 217

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (68)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1073

Asn Lys Glu Gln Leu Met Asp Lys Ser Gly Ile Asp Ser Leu Asp His

Val Thr Ser Asp Ala Val Glu Leu Ala Asn Arg Ser Asp Asn Ser Ser 25 20

Asp Ser Ser Leu Phe Lys Thr Gln Cys Ile Pro Tyr Ser Pro Lys Gly

1064

35 45 Glu Lys Arg Asn Pro Ile Arg Lys Phe Val Arg Thr Pro Glu Ser Val 55 His Ala Ser Xaa Ser Ser Ser Asp Ser Ser Phe Glu Pro Ile Pro Leu Thr Ile Lys Ala Ile Phe Glu Arg Phe Lys Asn Arg Lys Lys Arg Tyr 90 Lys Lys Lys Lys Arg Arg Tyr Gln Pro Thr Gly Arg Pro Arg Gly 105 Arg Pro Glu Gly Arg Arg Asn Pro Ile Tyr Ser Leu Ile Asp Lys Lys 120 Lys Gln Phe Arg Ser Arg Gly Ser Gly Phe Pro Phe Leu Glu Ser Glu 135 Asn Glu Lys Asn Ala Pro Trp Arg Lys Ile Leu Thr Phe Glu Gln Ala Val Ala Arg Gly Phe Phe Asn Tyr Ile Glu Lys Leu Lys Tyr Glu His 170 His Leu Lys Glu Ser Leu Lys Gln Met Asn Val Gly Glu Asp Leu Glu 180 185 Asn Glu Asp Phe Asp Ser Arg Arg Tyr Lys Phe Leu Asp Asp Asp Gly 200 205 Ser Ile Ser Pro Ile Glu Glu Ser Thr 210 215 <210> 1074 <211> 161 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (110) <223> Xaa equals any of the naturally occurring L-amino acids <220>

<223> Xaa equals any of the naturally occurring L-amino acids

<221> SITE <222> (122)

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<220>
 <221> SITE
 <222> (123)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <220>
 <221> SITE
 <222> (125)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <220>
 <221> SITE
 <222> (128)
 <223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (147)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1074
Thr His Tyr Arg Ala Lys Leu Val Arg Leu Pro Gly Thr Gly Ser Gly
                                     10
Asn Ser Arg Val Asp Pro Arg Val Arg Glu Gln Pro Ser Pro Ala Ser
                                 25
Ser Ala Pro Gly Gln Leu Asn Ser Cys Gln Asp Val Leu Pro Ala Glu
                             40
Pro Ala Ala Val Pro Thr Pro Thr Gln Val Ser Leu Thr Gln Val Ser
                        55
Pro Lys Glu Pro Ser Thr Val Ser Ala Ser Ser Phe Leu Trp Leu Cys
Pro Lys Leu Trp Gly Leu Trp Pro Ser Ser Glu Gly Gly Cys Phe Leu
Asn His His Arg Arg His His Arg Cys Arg Arg Gln Arg Xaa Asn Ser
Cys Asp Arg Ala Val Val Ser Lys Ala Xaa Xaa Leu Xaa Ala Ala Xaa
                            120
Phe Trp Gly Leu Leu Ile Gln Ile Leu Met Leu Arg Gln Ala Ile
Phe Gly Xaa Asn Lys Asn Ser Gln Glu Ala Lys Asn Ser Pro Ile Trp
                                       155
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Lys

<210> 1075

WO 00/55350

<211> 221

<212> PRT

<213> Homo sapiens

<400> 1075

Ser Ser Ser Trp His Ala Arg Tyr Thr Val Leu Thr Tyr Leu Gln Thr $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Met Val Phe Tyr Asn Leu Phe Ile Phe Leu Asn Asn Glu Asp Ala Val 20 25 30

Lys Asp Ile Arg Trp Leu Val Ile Ser Leu Leu Glu Asp Glu Gln Leu 35 40 45

Glu Val Arg Glu Met Ala Ala Thr Thr Leu Ser Gly Leu Leu Gln Cys $50 \hspace{1cm} 55 \hspace{1cm} 60$

Asn Phe Leu Thr Met Asp Ser Pro Met Gln Ile His Phe Glu Gln Leu 65 70 75 80

Cys Lys Thr Lys Leu Pro Lys Lys Arg Lys Arg Asp Pro Gly Ser Val

Gly Asp Thr Ile Pro Ser Ala Glu Leu Val Lys Arg His Ala Gly Val

Leu Gly Leu Gly Ala Cys Val Leu Ser Ser Pro Tyr Asp Val Pro Thr 115 120 125

Trp Met Pro Gln Leu Leu Met Asn Leu Ser Ala His Leu Asn Asp Pro 130 135 140

Gln Pro Ile Glu Met Thr Val Lys Lys Thr Leu Ser Asn Phe Arg Arg 145 150 155 160

Leu Thr Met Thr Thr Gly Arg Asn Ile Asn Ser Asn Ser Leu Met Thr 165 170 175

Asn Cys Leu Phe Ser Pro Ile Phe Leu Cys His His Ala Ile Met His 180 185 190

Arg Lys Met Thr Ser Pro His Phe Arg Leu Phe Ser Ser Lys Ile Pro 195 200 205

```
His Pro Gln Val Pro Ser Val Val Ala Leu Cys Lys Phe
    210
                        215
<210> 1076
<211> 166
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (56)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (135)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (163)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (166)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1076
Ala Arg Gly Ala Arg Val Arg Ala Cys Ala Ser Leu Gly Ser Trp Arg
Gly Pro Arg Gly Glu Gly Trp Lys Met Ser Met Asp Val Thr Phe Leu
Gly Thr Gly Ala Ala Tyr Pro Ser Pro Thr Arg Gly Ala Ser Ala Val
                     40
Val Leu Arg Cys Glu Gly Glu Xaa Trp Leu Phe Asp Cys Gly Glu Gly
                        55
Thr Gln Thr Gln Leu Met Lys Ser Gln Leu Lys Ala Gly Arg Ile Thr
Lys Ile Phe Ile Thr His Leu His Gly Asp His Phe Phe Gly Leu Pro
Gly Leu Leu Cys Thr Ile Ser Leu Gln Ser Gly Ser Met Val Ser Lys
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Gln Pro Ile Glu Ile Tyr Gly Pro Val Gly Phe Gly Thr Leu Ser Gly
115 120 125

Glu Pro Trp Asn Ser Leu Xaa Arg Glu Leu Val Phe His Tyr Val Val 130 135 140

His Glu Leu Val Pro Thr Ala Asp Gln Cys Pro Ala Glu Gly Thr Lys 145 150 155 160

Arg Ile Xaa Ala Cys Xaa 165

<210> 1077

WO 00/55350

<211> 239

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (25)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1077

Gly Leu Arg Ala Leu Ser Gln His Thr Asp Leu Ser Pro Leu Ser Pro $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Lys Thr Pro Ala Pro Ser Met Arg Xaa Lys Met Gly Asn Gly Thr Glu 20 25 30

Glu Asp Tyr Asn Phe Val Phe Lys Val Val Leu Ile Gly Glu Ser Gly
35 40 45

Val Gly Lys Thr Asn Leu Leu Ser Arg Phe Thr Arg Asn Glu Phe Ser 50 55 60

His Asp Ser Arg Thr Thr Ile Gly Val Glu Phe Ser Thr Arg Thr Val 65 70 75 80

Met Leu Gly Thr Ala Ala Val Lys Ala Gln Ile Trp Asp Thr Ala Gly 85 90 95

Leu Glu Arg Tyr Arg Ala Ile Thr Ser Ala Tyr Tyr Arg Gly Ala Val 100 105 110

Gly Ala Leu Leu Val Phe Asp Leu Thr Lys His Gln Thr Tyr Ala Val

Val Glu Arg Trp Leu Lys Glu Leu Tyr Asp His Ala Glu Ala Thr Ile

1069

130 135 140 Val Val Met Leu Val Gly Asn Lys Ser Asp Leu Ser Gln Ala Arg Glu 150 155 Val Pro Thr Glu Glu Ala Arg Met Phe Ala Glu Asn Asn Gly Leu Leu 170 Phe Leu Glu Thr Ser Ala Leu Asp Ser Thr Asn Val Glu Leu Ala Phe 180 185 Glu Thr Val Leu Lys Glu Ile Phe Ala Lys Val Ser Lys Gln Arg Gln 200 Asn Ser Ile Arg Thr Asn Ala Ile Thr Ser Gly Ser Ala Gln Ala Gly 215 Gln Glu Pro Gly Pro Gly Glu Lys Arg Ala Cys Cys Ile Ser Leu 230 235 <210> 1078 <211> 171 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (123) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1078 Ile Leu Lys Gly Ser Ser Gly Ser Val Trp Leu Arg Asn Leu Gln Leu Gly Leu Phe Gly Thr Ala Leu Gly Leu Val Gly Leu Trp Trp Ala Glu Gly Thr Ala Val Ala Thr Arg Gly Phe Phe Phe Gly Tyr Thr Pro Ala 40 Val Trp Gly Val Val Leu Asn Gln Ala Phe Gly Gly Leu Leu Val Ala Val Val Lys Tyr Ala Asp Asn Ile Leu Lys Gly Phe Ala Thr Ser 70 Leu Ser Ile Val Leu Ser Thr Val Ala Ser Ile Arg Leu Phe Gly Phe 85 90

His Val Asp Pro Leu Phe Ala Leu Gly Ala Gly Leu Val Ile Gly Ala 100 105 110

Val Tyr Leu Tyr Ser Leu Pro Arg Gly Ala Xaa Lys Ala Ile Ala Ser 115 120 125

Ala Ser Ala Ser Ala Ser Gly Pro Cys Val His Gln Gln Pro Pro Gly 130 135 140

Gln Pro Pro Pro Pro Gln Leu Ser Ser His Arg Gly Asp Leu Ile Thr 145 150 155 160

Glu Pro Phe Leu Pro Lys Ser Val Leu Val Lys 165 170

<210> 1079

<211> 141

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (59)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1079

Arg Arg Val Cys His Ser Ser Pro His Leu Ser Ser Pro Arg Ala Ala 1 5 10 15

Cys Glu Gln Gln Ala Val Ala Leu Thr Leu Gln Glu Asp Arg Ala Ser

Leu Thr Leu Ser Gly Gly Pro Ser Ala Leu Ala Phe Asp Leu Ser Lys 35 40 45

Val Pro Gly Pro Glu Ala Ala Pro Arg Leu Xaa Ala Leu Thr Leu Gly 50 55 60

Leu Ala Lys Arg Val Trp Ser Leu Glu Arg Arg Leu Ala Ala Ala Glu 65 70 75 80

Glu Thr Ala Val Ser Pro Arg Lys Ser Pro Arg Pro Ala Gly Pro Gln
85 90 95

Leu Phe Leu Pro Asp Pro Asp Pro Gln Arg Gly Gly Pro Gly Pro Gly 100 105 110

Val Arg Arg Cys Pro Gly Glu Ser Leu Ile Asn Pro Gly Phe Lys 115 120 125 Ser Lys Lys Pro Ala Gly Gly Val Asp Phe Asp Glu Thr 130 135 140

<210> 1080

<211> 359

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (6)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1080

Ala Val Glu Ser Arg Xaa Pro Gly Trp Asn His His Gly Ile Gln Phe 1 5 10 15

Pro Cys Gly Ser Val Trp Leu Glu His Ala Ile Ala Met Ile Cys Gly 20 25 30

Asn Val Cys Leu Trp Lys Gly Ala Pro Thr Thr Ser Leu Ile Ser Val 35 40 45

Ala Val Thr Lys Ile Ile Ala Lys Val Leu Glu Asp Asn Lys Leu Pro 50 55 60

Gly Ala Ile Cys Ser Leu Thr Cys Gly Gly Ala Asp Ile Gly Thr Ala 65 70 75 80

Met Ala Lys Asp Glu Arg Val Asn Leu Leu Ser Phe Thr Gly Ser Thr 85 90 95

Gln Val Gly Lys Gln Val Gly Leu Met Val Gln Glu Arg Phe Gly Arg 100 105 110

Ser Leu Leu Glu Leu Gly Gly Asn Asn Ala Ile Ile Ala Phe Glu Asp 115 120 125

Ala Asp Leu Ser Leu Val Val Pro Ser Ala Leu Phe Ala Ala Val Gly
130 135 140

Thr Ala Gly Gln Arg Cys Thr Thr Ala Arg Arg Leu Phe Ile His Glu 145 150 155 160

Ser Ile His Asp Glu Val Val Asn Arg Leu Lys Lys Ala Tyr Ala Gln 165 170 175

Ile Arg Val Gly Asn Pro Trp Asp Pro Asn Val Leu Tyr Gly Pro Leu

180 185 190 His Thr Lys Gln Ala Val Ser Met Phe Leu Gly Ala Val Glu Glu Ala 195 200 Lys Lys Glu Gly Gly Thr Val Val Tyr Gly Gly Lys Val Met Asp Arq 215 Pro Gly Asn Tyr Val Glu Pro Thr Ile Val Thr Gly Leu Gly His Asp 230 235 Ala Ser Ile Ala His Thr Glu Thr Phe Ala Pro Ile Leu Tyr Val Phe 245 250 Lys Phe Lys Asn Glu Glu Glu Val Phe Ala Trp Asn Asn Glu Val Lys 265 Gln Gly Leu Ser Ser Ser Ile Phe Thr Lys Asp Leu Gly Arg Ile Phe Arg Trp Leu Gly Pro Lys Gly Ser Asp Cys Gly Ile Val Asn Val Asn Ile Pro Thr Ser Gly Ala Glu Ile Gly Gly Ala Phe Gly Gly Glu Lys His Thr Gly Gly Gly Arg Glu Ser Gly Ser Asp Ala Trp Lys Gln Tyr Met Arg Arg Ser Thr Cys Thr Ile Asn Tyr Ser Lys Asp Leu Pro Leu 345 Ala Gln Gly Ile Lys Phe Gln 355 <210> 1081 <211> 138 <212> PRT <213> Homo sapiens <400> 1081 Ala Val Pro Leu Leu Gly Arg Pro Thr Arg Pro Val Gly Pro Arg Ala 5

Ala Leu Thr Met Thr Gln Gln Gly Ala Ala Leu Gln Asn Tyr Asn Asn 20 25 30

Glu Leu Val Lys Cys Ile Glu Glu Leu Cys Gln Lys Arg Glu Glu Leu 35 40 45

 Cys
 Arg
 Gln
 Ile
 Gln
 Glu
 Glu
 Asp
 Glu
 Lys
 Gln
 Arg
 Leu
 Gln
 Asn
 Glu
 Asn
 Glu
 Lys
 Leu
 Ala
 Arg
 Val
 Asn
 Glu
 Asn
 Leu

 Ala
 Arg
 Lys
 Ile
 Ala
 Ser
 Arg
 Asn
 Glu
 Phe
 Asp
 Arg
 Thr
 Ile
 Ala
 Glu
 Phe
 Asp
 Arg
 Thr
 Ile
 Ala
 Glu
 Phe
 Asp
 Arg
 Thr
 Ile
 Ala
 Glu
 Phe
 Asp
 Arg
 Thr
 Ile
 Leu
 Leu
 Ile
 I

Ser Val Leu Lys Arg Glu Ala Gly Asn Leu Thr Lys Ala Thr Ala Pro 115 120 125

Asp Gln Lys Ser Ser Gly Gly Arg Asp Ser 130

<210> 1082

<211> 339

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (42)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1082

Ser Pro Ile Ser Asn Cys Glu Ile Thr Ile Thr Asp Pro Gly Lys Phe
1 5 10 15

Tyr Asn Ser Asn Ser Val Phe Ser Arg Gly Asn Met Ala Lys Val Phe 20 25 30

Ser Phe Ile Leu Val Thr Thr Ala Leu Xaa Met Gly Arg Glu Ile Ser 35 40 \cdot 45

Ala Leu Glu Asp Cys Ala Gln Glu Gln Met Arg Leu Arg Ala Gln Val 50 55 60

Arg Leu Leu Glu Thr Arg Val Lys Gln Gln Gln Val Lys Ile Lys Gln 65 70 75 80

Leu Leu Gln Glu Asn Glu Val Gln Phe Leu Asp Lys Gly Asp Glu Asn 85 90 95

Thr Val Val Asp Leu Gly Ser Lys Arg Gln Tyr Ala Asp Cys Ser Glu

1074

			100					105					110		
Ile	Phe	Asn 115	Asp	Gly	Tyr	ГÀЗ	Leu 120	Ser	Gly	Phe	Tyr	Lys 125	Ile	Lys	Pro
Leu	Gln 130	Ser	Pro	Ala	Glu	Phe 135	Ser	Val	Tyr	Cys	Asp 140	Met	Ser	Asp	Gly
Gly 145	Gly	Trp	Thr	Val	Ile 150	Gln	Arg	Arg	Ser	Asp 155	Gly	Ser	Glu	Asn	Phe 160
Asn	Arg	Gly	Trp	Lys 165	Asp	Tyr	Glu	Asn	Gly 170	Phe	Gly	Asn	Phe	Val 175	Gln
Lys	His	Gly	Glu 180	Tyr	Trp	Leu	Gly	Asn 185	Lys	Asn	Leu	His	Phe 190	Leu	Thr
Thr	Gln	Glu 195	Asp	Tyr	Thr	Leu	Lys 200	Ile	Asp	Leu	Ala	Asp 205	Phe	Glu	Lys
Asn	Ser 210	Arg	Tyr	Ala	Gln	Tyr 215	Lys	Asn	Phe	Lys	Val 220	Gly	Asp	Glu	Lys
Asn 225	Phe	Tyr	Glu	Leu	Asn 230	Ile	Gly	Glu	Tyr	Ser 235	Gly	Thr	Ala	Gly	Asp 240
Ser	Leu	Ala	Gly	Asn 245	Phe	His	Pro	Glu	Val 250	Gln	Trp	Trp	Ala	Ser 255	His
Gln	Arg	Met	Lys 260	Phe	Ser	Thr	Trp	Asp 265	Arg	Asp	His	Asp	Asn 270	туг	Glu
Gly	Asn	Cys 275	Ala	Glu	Glu	Asp	Gln 280	Ser	Gly	Trp	Trp	Phe 285	Asn	Arg	Суз
His	Ser 290	Ala	Asn	Leu	Asn	Gly 295	Val	Tyr	Tyr	Ser	Gly 300	Pro	Tyr	Thr	Ala
Lys 305	Thr	Asp	Asn	Gly	Ile 310	Val	Trp	Tyr	Thr	Trp 315	His	Gly	Trp	Trp	Tyr 320
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Asn Val Ile

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Gly	Arg	, Pro	Arç 20		Pro	Leu	ı Val	Asn 25		Leu	Leu	Thr	Ala		Glu
Phe	Leu	1 Ile 35		Thr	Gly	Cys	Met 40		Cys	Val	Phe	Leu 45		Cys	Phe
Ser	Pro		Ala	Gly	Leu	₽he 55		Gly	Trp	Gly	Gly 60	Gly	Phe	Ala	Met
Ser 65		Asp	Asp	Ser	Arg 70	Ala	Ser	Thr	Ser	Ser 75	Ser	Ser	Ser	Ser	Ser 80
Ser	Asn	Gln	Gln	Thr 85		Lys	Glu	Thr	Asn 90	Thr	Pro	Lys	Lys	Lys 95	Glu
Ser	Lys	Val	ser 100		Ser	Lys	Asn	Ser 105	Lys	Leu	Leu	Ser	Thr 110	Ser	Ala
Lys	Arg	Ile 115		Lys	Glu	Leu	Ala 120	Asp	Ile	Thr	Leu	Asp 125	Pro	Pro	Pro
Asn	Cys 130	Ser	Ala	Gly	Pro	Lys 135	Gly	Asp	Asn	Ile	Tyr 140	Glu	Trp	Arg	Ser
Thr 145	Ile	Leu	Gly	Pro	Pro 150	Gly	Ser	Val	Tyr	Glu 155	Gly	Gly	Val	Phe	Phe 160
Leu	Asp	Ile	Thr	Phe 165	Thr	Pro	Glu	Tyr	Pro 170	Phe	Lys	Pro	Pro	Lys 175	Val
Thr	Phe	Arg	Thr 180	Arg	Ile	Tyr	His	Cys 185	Asn	Ile	Asn	Ser	Gln 190	Gly	Val
Ile	Cys	Leu 195	Asp	Ile	Leu	Lys	Asp 200	Asn	Trp	ser	Pro	Ala 205	Leu	Thr	Ile
Ser	Lys 210	Val	Leu	Leu	Ser	Ile 215	Суз	Ser	Leu	Leu	Thr 220	Asp	Cys	Asn	Pro

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Ala Glu His Asp Arg Met Ala Arg Gln Trp Thr Lys Arg Tyr Ala Thr 245 250 255

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Met Gly Lys Val Ser Lys Asn Asp Thr Glu Glu Glu Ser Asn Lys Ser 35 40 45

Ala Thr Thr Asp Asn Glu Ile Ser Arg Thr Glu Tyr Leu Cys Glu Asn 50 55 60

Ser Leu Glu Gly Lys Asn Lys Asp Asn Ser Ser Asn Glu Val Phe Pro 65 70 75 80

Gln Gly Ala Glu Glu Arg Met Cys Tyr Gln Cys Glu Ser Glu Asp Glu 85 90 95

Pro Gln Ala Asp Gly Ser Gly Leu Thr Thr Ala Pro Pro Thr Pro Arg 100 105 110

Asp Ser Leu Gln Pro Ser Ile Lys Gln Arg Leu Ala Arg Leu Gln Leu 115 120 125

Ser Pro Asp Phe Thr Phe Thr Ala Gly Leu Ala Ala Glu Val Ala Ala 130 135 140

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Glu Glu Glu Gln Ile Ile Glu Glu Asn Lys Asn Glu Ile Glu Glu Lys 165 170 175

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Gln	Gly	Asp 35	_	Thr	Trp	Ser	Pro 40	_	Thr	Pro	Ser	Cys 45	_	Asp	Ile
Cys	Asn 50		Pro	Pro	Lys	Ile 55		His	Gly	His	Туг 60	_	Gln	Ser	Sei
Ser 65	Tyr	Ser	Phe	Phe	Lys 70	Glu	Glu	Ile	Ile	Туг 75		Суѕ	Asp	Lys	Gl _y
Tyr	Ile	Leu	Val	Gly 85	Gln	Ala	Lys	Leu	Ser 90	-	Ser	туr	Ser	His 95	Trp
Ser	Ala	Pro	Ala 100	Pro	Gln	Cys	Lys	Ala 105		Cys	Arg	Lys	Pro 110	Glu	Leu
Val	Asn	Gly 115	Arg	Leu	Ser	Val	Asp 120	Lys	Asp	Gln	Tyr	Val 125	Glu	Pro	Glu
Asn	Val 130	Thr	Ile	Gln	Cys	Asp 135	Ser	Gly	Tyr	Gly	Val 140	Val	Gly	Pro	Gln
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Cys	Glu	Trp	Glu	Thr 165	Pro	Glu	Gly	Cys	Glu 170	Gln	Val	Leu	Thr	Gly 175	Lys
Arg	Leu	Met	Gln 180	Cys	Leu	Pro	Asn	Pro 185	Glu	Asp	Val	Lys	Met 190	Ala	Leu
3lu	Val	Tyr 195	Lys	Leu	Ser	Leu	Glu 200	Ile	Glu	Gln	Leu	Glu 205	Leu	Gln	Arg
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1 5 10 15

Thr Val Asp Cys Glu Asp Tyr Val His Val Val Glu Phe Asn Pro Phe 20 25 30

Glu Asn Gly Asp Ser Gly Asn Leu Ile Ala Tyr Gly Gly Asn Asn Tyr

		3 5	5				40)				45	5		
Val	Val		e Gly	Thr	Cys	Thr 55		Glr	Glu	ı Glu	Glu 60		a Asp	Val	. Glı
Gly 65		: Gln	туг	Lys	Thr 70		Arg	Thr	Phe	His 75		: Gly	Val	. Arg	Va.
Asp	Gly	Ile	Ala	Trp 85		Pro	Glu	Thr	Arg		Asp	Ser	Leu	Pro 95	
Val	Ile	Lys	Phe 100	Cys	Thr	Ser	Ala	Ala 105	-	Met	Lys	Ile	Arg 110		Phe
Thr	Ser	Asp 115		Gln	Asp	Lys	Asn 120		Tyr	Lys	Val	Leu 125		Gly	His
Thr	Asp 130		Ile	Asn	Gly	Leu 135		Phe	Asp	Pro	Lys 140		Gly	Gln	Glu
Ile 145	Ala	Ser	Val	Ser	Asp 150	Asp	His	Thr	Cys	Arg 155		Trp	Asn	Leu	Glu 160
Gly	Val	Gln	Thr	Ala 165	His	Phe	Val	Leu	His 170	Ser	Pro	Gly	Met	Ser 175	Val
Суз	Trp	His	Pro 180	Glu	Glu	Thr	Phe	Lys 185	Leu	Met	Val	Ala	Glu 190	Lys	Asn
Gly	Thr	Ile 195	Arg	Phe	Tyr	Asp	Leu 200	Leu	Ala	Gln	Gln	Ala 205	Ile	Leu	Ser
Leu	Glu 210	Ser	Glu	Gln	Val	Pro 215	Leu	Met	Ser	Ala	His 220	Trp	Суѕ	Leu	Lys
Asn 225	Thr	Phe	Lys	Val	Gly 230	Ala	Val	Ala	Gly	Asn 235	Asp	Trp	Leu	Ile	Trp 240
Asp	Ile	Thr	Arg	Ser 245	Ser	Tyr	Pro	Gln	Asn 250	Lys	Arg	Pro	Val	His 255	Met
Asp	Arg	Ala	Cys 260	Leu	Phe	Arg	Trp	Ser 265	Thr	Ile	Ser	Glu	Asn 270	Leu	Phe
Ala	Thr	Thr 275	Gly	Tyr	Pro	Gly	Lys 280	Met	Gln	Ala	Ser	Phe 285	Lys	Phe	Ile

Ile

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1				5					10					15	
Gly	Leu	ı Ser	Ser	Leu	Ser	Asp	Thr	Met	Ile	Met	Asp	Ser	Ile	Ala	Ala
			20					25					30		
Phe	Leu	. Val	Leu	Pro	Asn	Arq	Leu	Leu	Val	Pro	Leu	Val	Pro	Asp	Leu
		35				_	40					45		-	
~1 .	_	1			_		_	_	_	_	_				
GIn	Asp 50		Ala	GIn	Leu	Arg 55		Pro	Leu	Pro	Arg 60	Gly	Ile	Ile	Arg
	30					,,,					00				
Ile	His	Leu	Leu	Ala	Ala	Arg	Gly	Leu	Ser	Ser	Lys	Asp	Lys	Tyr	Val
65					70					75					80
T.vs	GIV	Leu	Tle	Glu	Glv	T.ve	Ser	Asn	Pro	ጥህዮ	Δla	T.e.11	Va 1	Ara	T.O.I
-3-	1	200	110	85	OL,	1,5	DCI	110p	90	-1-		Dou	****	95	acu.
Gly	Thr	Gln		Phe	Cys	Ser	Arg		Ile	Asp	Glu	Glu		Asn	Pro
			100					105					110		
Gln	Trp	Gly	Glu	Thr	Tyr	Glu	Val	Met	Val	His	Glu	Val	Pro	Gly	Gln
		115					120					125			
C111	T1.0	c1	**-1	~ 1	**- 1	n L ~	3	T	n	T)	>	T	.	•	5 1-
Giu	130	Glu	Λ α Τ	GIU	var	135	Asp	ràs	Asp	PIO	140	ьys	Asp	Asp	hue
	Gly	Arg	Met	Lys		Asp	Val	Gly	Lys		Leu	Gln	Ala	Ser	Val
145					150					155					160
Leu	Asp	Asp	Trp	Phe	Pro	Leu	Gln	Glv	Glv	Gln	Glv	Gln	Val	His	Leu
	•			165				2	170					175	
	_				_	_	_	_				_			
Arg	Leu	Glu	Trp 180	Leu	Ser	Leu	Leu		qzA	Ala	Glu	Lys		Glu	Gln
			190					185					190		
Val	Leu	Gln	Trp	Asn	Trp	Gly	Val	Ser	Ser	Arg	Pro	Asp	Pro	Pro	Ser
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Ala	Ala 210		Leu	. Val	. Val	Tyr 215		. Asp	Arg	, Ala	220) Let	Pro) Le
Lys 225		Gly	Asn	Lys	Glu 230		Asn	Pro) Met	. Val 235	Gln	Leu	Ser	Ile	Gl: 240
Asp	Val	Thr	Gln	Glu 245		Lys	Ala	. Val	. Туг 250		Thr	Asn	Cys	255	
Trp	Glu	Glu	Ala 260		Arg	Phe	Phe	Leu 265		Asp	Pro	Gln	Ser 270		Glu
Leu	Asp	Val 275		Val	Lys	Asp	Asp 280		Arg	Ala	Leu	Thr 285		Gly	Ala
Leu	Thr 290		Pro	Leu	Ala	Arg 295		Leu	Thr	Ala	300		Leu	Ile	Let
Asp 305	Gln	Trp	Phe	Gln	Leu 310	Ser	Ser	Ser	Gly	Pro 315	Asn	Ser	Arg	Leu	Ту1 320
Met	Lys	Leu	Val	Met 325	Arg	Ile	Leu	Tyr	Leu 330	_	Ser	Ser	Glu	11e 335	
			340			-		345		_	Asp		350		
		355		_			360	_			Pro	365		-	
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385					390				-	395	Arg				400
		-	_	405		_		-	410	-	Leu	_		415	
			420					425			Leu		430		
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	450			,		455					Asp 460				
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Glu	Trp	Leu	Thr	485		ı Asp	val	. Pro	490	_	/ Arc	j Let	ı His	495	
Leu	Glu	Arg	500		Pro	Arg	, Pro	505		a Ala	a Glu	ı Leı	510		va:
Leu	Gln	Val 515		Ser	Leu	ı Il∈	520		Glr	Lys	s Ser	525		Leu	Ala
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Arg 545		Gly	Thr	Lys	His 550		Ser	Pro	Tyr	555		Leu	Thr	Val	Gl ₃ 560
Asp	Ser	Ser	His	Lys 565		Lys	Thr	Ile	Ser 570		Thr	Ser	Ala	Pro 575	
Trp	Asp	Glu	Ser 580		Ser	Phe	Leu	Ile 585	-	Lys	Pro	His	590		Sei
Leu	Glu	Leu 595		Val	Arg	Gly	Glu 600	_	Thr	Gly	Val	Leu 605	_	Ser	Let
Ser	Leu 610	Pro	Leu	Ser	Glu	Leu 615	Leu	Val	Ala	Asp	620		Cys	Leu	Asp
625					630		Gly		_	635					640
		_		645			Gln		650	•				655	
		_	660				Ser	665					670		
	_	675					Thr 680					685		_	
	690				_	695	Pro				700		-		
705					710		Trp			715					720
				725			Arg		730					735	
Pro	Pro		Pro		Val	Ser	Leu	Leu 745		Leu	Pro	Asp	Lys		Arg

1083

Gly Thr Lys Arg Arg Thr Ser Gln Lys Lys Arg Thr Leu Ser Pro Glu 755 760 Phe Asn Glu Arg Phe Glu Trp Glu Leu Pro Leu Asp Glu Ala Gln Arg 775 780 Arg Lys Leu Asp Val Ser Val Lys Ser Asn Ser Ser Phe Met Ser Arg 785 790 795 Glu Arg Glu Leu Leu Gly Lys Val Gln Leu Asp Leu Ala Glu Thr Asp 805 810 Leu Ser Gln Gly Val Ala Arg Trp Tyr Asp Leu Met Asp Asn Lys Asp 820 825 Lys Gly Ser Ser 835 <210> 1089 <211> 409 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (17) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (65) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (393) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (406) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1089 Arg Ser Ser Val Ala Ser Val His Thr Trp Arg Gln Arg Arg Gln Val Xaa Val Phe Val Leu Pro Ser Thr Ala Asn Met Lys Arg Pro Lys Leu 25 20

Lys	S Lys	3 Alá		Lys	Arg	Met	Thr 40	_	His	Lys	Arg	Туг 45	_	: Ile	Gln
Lys	5 Lys		l Arç	g Glu	His	His 55	•	Lys	Leu	Arg	Lys 60		Ala	Lys	Lys
Xaa 65		7 His	. Lys	. Lys	Pro 70	-	Lys	Asp	Pro	Gly 75		Pro	Asn	Ser	Ala 80
Pro	Phe	. Lys	Glu	85		Leu	Arg	Glu	Ala 90		Leu	Arg	Lys	Gln 95	Arg
Leu	Glu	ı Glu	Leu 100		Gln	Gln	Gln	Lys 105		Asp	Arg	Gln	Lys 110	Glu	Leu
Glu	Lys	Lys 115		Lys	Leu	Glu	Thr 120	Asn	Pro	Asp	Ile	Lys 125	Pro	Ser	Asn
Val	Glu 130		Met	Glu	Lys	Glu 135		Gly	Leu	Суз	Lys 140	Thr	Glu	Asn	Lys
Ala 145		Ser	Gly	Lys	Gln 150	Asn	Ser	Lys	Lys	Leu 155	Tyr	Суз	Gln	Glu	Leu 160
Lys	Lys	Val	Ile	Glu 165	Ala	Ser	Asp	Val	Val 170	Leu	Glu	Val	Leu	Asp 175	Ala
Arg	Asp	Pro	Leu 180	Gly	Cys	Arg	Cys	Pro 185	Gln	Val	Glu	Glu	Ala 190	Ile	Val
Gln	Ser	Gly 195	Gln	Lys	Lys	Leu	Val 200	Leu	Ile	Leu	Asn	Lys 205	Ser	Asp	Leu
Val	Pro 210	Lys	Glu	Asn	Leu	Glu 215	Ser	Trp	Leu	Asn	Туг 220	Leu	Lys	Lys	Glu
Leu 225	Pro	Thr	Val	Val	Phe 230	Arg	Ala	Ser	Thr	Lys 235	Pro	Lys	Asp	Lys	Gly 240
Lys	Ile	Thr	Lys	Arg 245	Val	Lys	Ala	Lys	Lys 250	Asn	Ala	Ala	Pro	Phe 255	Arg
Ser	Glu	Val	Cys 260	Phe	Gly	Lys	Glu	Gly 265	Leu	Trp	Lys		Leu 270	Gly	Gly
Phe	Gln	Glu 275	Thr	Cys	Ser	Lys	Ala 280	Ile	Arg	Val	_	Val 285	Ile	Gly	Phe
Pro	Asn 290	Val	Gly	Lys		Ser 295	Ile	Ile	Asn	Ser	Leu 300	Lys	Gln	Glu	Gln

Met Cys Asn Val Gly Val Ser Met Gly Leu Thr Arg Ser Met Gln Val 305 310 315 Val Pro Leu Asp Lys Gln Ile Thr Ile Ile Asp Ser Pro Ser Phe Ile 325 330 Val Ser Pro Leu Asn Ser Ser Ser Ala Leu Ala Leu Arg Ser Pro Ala 345 Ser Ile Glu Val Val Lys Pro Met Glu Ala Ala Ser Ala Ile Leu Ser 360 Gln Ala Asp Ala Arg Gln Val Val Leu Lys Tyr Thr Val Pro Gly Tyr 375 Arg Asn Ser Leu Gly Ile Phe Tyr Xaa Ala Cys Ser Glu Lys Arg Tyr Ala Pro Lys Arg Trp Xaa Pro Lys Cys 405 <210> 1090 <211> 161 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (5) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (56) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1090 Pro Lys Asn Trp Xaa Thr Ala Arg Ala Asp His His Ala Ser Met Asn Trp Val Pro Cys Gly His Ser Tyr Phe Gly Ala Thr Leu Asn Ser Phe 20 25 Ile His Val Leu Met Tyr Ser Tyr Tyr Gly Leu Ser Ser Val Pro Ser

Met Arg Pro Tyr Leu Trp Trp Xaa Glu Val His His Ser Gly Ala Ala

1086

Ala Ser Val Cys Ala Asp Asn His Pro Asp Gln Leu Arg Gly His Leu 70 Ala Val His Ile Pro Ser Trp Leu Val Val Phe Pro Asp Trp Ile His 90 Asp Phe Pro Asp Cys Ser Leu His Lys Leu Leu His Ser Asp Leu Gln 100 105 Gln Glu Arg Gly Leu Pro Lys Glu Arg Pro Pro Glu Gly Pro Pro Glu 120 115 Trp Val His Gly Cys Cys Glu Trp Thr His Gln Gln Leu Phe Thr Pro 135 Gly Lys Gln Cys Glu Ala Lys Glu Ala Ala Glu Gly Leu Lys Ser Lys 150 Asn <210> 1091 <211> 118 <212> PRT <213> Homo sapiens <400> 1091 Ser Lys Asn Ser Ala Arg Glu Glu Met Ala Ala Ser Ser Ser Ser Ser Ala Gly Gly Val Ser Gly Ser Ser Val Thr Gly Ser Gly Phe Ser Val Ser Asp Leu Ala Pro Pro Arg Lys Ala Leu Phe Thr Tyr Pro Lys 40 Gly Ala Gly Glu Met Leu Glu Asp Gly Ser Glu Arg Phe Leu Cys Glu 60 55 Ser Val Phe Ser Tyr Gln Val Ala Ser Thr Leu Lys Gln Val Lys His 70 Asp Gln Gln Val Ala Arg Met Glu Lys Leu Ala Gly Leu Val Glu Glu 90 Leu Glu Ala Asp Glu Trp Arg Phe Lys Pro Ile Glu Gln Leu Leu Gly

105

1087

Phe Thr Pro Ser Ser Gly 115

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Thr Phe Ser Val Gly Trp Asn Thr Phe Ala Cys Ser Glu Ser Leu Glu 35 40 45

Lys Pro Leu Asn Trp Leu Leu Phe Asn Tyr Tyr Leu Thr Thr Cys Leu 50 55 60

Gln Ser Ser Val Asn Lys His Arg His Met Phe Val Lys Gln Val Asp 65 70 75 80

Met Asp His Val Met Lys Ala Lys Ser Ile Arg Glu Phe Asp Lys Arg 85 90 95

Phe Thr Ser Val Met Phe Gly Tyr Gln Thr Ile Asp Asp Tyr Tyr Thr
100 105 110

Asp Ala Ser Pro Ser Pro Arg Leu Lys Ser Val Gly Ile Pro Val Leu 115 120 125

Cys Leu Asn Ser Val Asp Asp Val Phe Ser Pro Ser His Ala Ile Pro 130 135 140

Ile Glu Thr Ala Lys Gln Asn Pro Asn Val Ala Leu Val Leu Thr Ser 145 150 155 160

Tyr Gly Gly His Ile Gly Phe Leu Glu Gly Ile Trp Pro Arg Gln Ser 165 170 175

Thr Tyr Met Asp Arg Val Phe Lys Gln Phe Val Gln Ala Met Val Glu 180 185 190

His Gly His Glu Leu Ser 195

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Gln Phe Asn Pro Thr Gln Val Ile Glu Thr Leu Gln Val Leu Glu Cys

:	225					230					235					240
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(Slu	Val	Thr	Ala 260	Tyr	Leu	Leu	Glu	Lys 265		Gly	Asp	Ile	His 270	Gly	Ala
J	?he	Leu	Ile 275		Leu	Glu	Arg	Leu 280	Gln	Ser	Lys	Leu	Gln 285	Glu	Val	Thr
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1	Leu	Asn	Gln	Gln	Gln 325	Arg	Glu	Ala	Leu	Trp 330	Phe	Pro	Leu	Leu	Glu 335	Ala
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Z	Ala	Phe 370	Ile	Ala	Leu	Pro	Ser 375	Ile	Leu	Gln	Arg	Ile 380	Leu	Gln	Asp	Pro
	7al 185	Tyr	Gly	Lys	Gly	Lys 390	Leu	Gly	Glu	Ile	Gln 395	Gly	Leu	Ile	Leu	Gly 400
M	let	Leu	Asp	Thr	Phe 405	Asn	Tyr	Glu	Gln	Thr 410	Leu	Leu	Glu	Thr	Thr 415	Thr
S	er	Leu	Leu	Asn 420	Gln	Asp	Leu	His	Trp 425	Ser	Leu	Сув	Asn	Leu 430	Arg	Ala
S	er	Val	Thr 435	Arg	Gly	Leu	Asn	Pro 440	ŗàa	Gln	Asp	Tyr	Cys 445	Ser	Ile	Суз
L	eu	Gln 450	Gln	Tyr	Lys	Arg	Arg 455	Gln	Glu	Met	Ala	Asp 460	Glu	Ile	Ile	Val
	he 65	Ser	Cys	Gly	His	Leu 470	Tyr	His	Ser	Phe	Cys 475	Leu	Gln	Asn	Lys	Glu 480
С	ys	Thr	Val	Glu	Phe 485	Glu	Gly	Gln	Thr	Arg 490	Trp	Thr	Cys	Tyr	Lys 495	Cys
Ş	er	Ser	Ser	Asn	Lvs	Val	Gly	Lys	Leu	Ser	Glu	Asn	Ser	Ser	Glu	Ile

500 505 510 Lys Lys Gly Arg Ile Thr Pro Ser Gln Val Lys Met Ser Pro Ser Tyr 520 His Gln Ser Lys Gly Asp Pro Thr Ala Lys Lys Gly Thr Ser Glu Pro 535 Val Leu Asp Pro Gln Gln Ile Gln Ala Phe Asp Gln Leu Cys Arg Leu 550 555 Tyr Arg Gly Ser Ser Arg Leu Ala Leu Leu Thr Glu Leu Ser Gln Asn 565 570 -Arg Ser Ser Glu Ser Tyr Arg Pro Phe Ser Gly Ser Gln Ser Ala Pro 585 Ala Phe Asn Ser Ile Phe Gln Asn Glu Asn Phe Gln Leu Gln Leu Ile 600 Pro Pro Pro Val Thr Glu Asp 610 <210> 1095 <211> 264 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (2) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (27) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1095 Trp Xaa Ser Thr Thr Ile Trp Lys Ala Gly Pro Pro Ala Gly Thr Gly 10 5 Pro Glu Phe Pro Gly Arg Pro Thr Arg Pro Xaa Thr Arg Gly Phe Trp Phe Cys Ser Ser Val Trp Val Ser Ser Arg Leu Leu Lys Met Asn Arg 40 Leu Phe Gly Lys Ala Lys Pro Lys Ala Pro Pro Pro Ser Leu Thr Asp

1092

50 55 60 Cys Ile Gly Thr Val Asp Ser Arg Ala Glu Ser Ile Asp Lys Lys Ile 70 75 Ser Arg Leu Asp Ala Glu Leu Val Lys Tyr Lys Asp Gln Ile Lys Lys 90 Met Arg Glu Gly Pro Ala Lys Asn Met Val Lys Gln Lys Ala Leu Arg 100 105 Val Leu Lys Gln Lys Arg Met Tyr Glu Gln Gln Arg Asp Asn Leu Ala 120 Gln Gln Ser Phe Asn Met Glu Gln Ala Asn Tyr Thr Ile Gln Ser Leu Lys Asp Thr Lys Thr Thr Val Asp Ala Met Lys Leu Gly Val Lys Glu Met Lys Lys Ala Tyr Lys Gln Val Lys Ile Asp Gln Ile Glu Asp Leu 170 Gln Asp Gln Leu Glu Asp Met Met Glu Asp Ala Asn Glu Ile Gln Glu 185 Ala Leu Ser Arg Ser Tyr Gly Thr Pro Glu Leu Asp Glu Asp Asp Leu 200 Glu Ala Glu Leu Asp Ala Leu Gly Asp Glu Leu Leu Ala Asp Glu Asp Ser Ser Tyr Leu Asp Glu Ala Ala Ser Ala Pro Ala Ile Pro Glu Gly Val Pro Thr Asp Thr Lys Asn Lys Asp Gly Val Leu Val Asp Glu Phe 245 250 Gly Leu Pro Gln Ile Pro Ala Ser 260 <210> 1096 <211> 244 <212> PRT <213> Homo sapiens

Ser Cys Cys Phe Leu Lys Arg Leu Gln Ala Ser Phe Pro Arg Thr Ala

5

<400> 1096

Val	Ser	Phe	Glu 20		Leu	Ala	Gly	Asp 25	Met	Pro	Arg	Gly	Arg 30	Lys	ser
Arg	Arg	Arg 35	_	Asn	Ala	Arg	Ala 40	Ala	Glu	Glu	Asn	Arg 45	Asn	Asn	Arg
Lys	Ile 50		Ala	Ser	Glu	Ala 55	Ser	Glu	Thr	Pro	Met 60	Ala	Ala	Ser	Val
Val 65	Ala	Ser	Thr	Pro	Glu 70	Asp	Asp	Leu	Ser	Gly 75	Pro	Glu	Glu	Asp	Pro 80
Ser	Thr	Pro	Glu	Glu 85	Ala	Ser	Thr	Thr	Pro 90	Glu	Glu	Ala	Ser	Ser 95	Thr
Ala	Gln	Ala	Gln 100	Lys	Pro	Ser	Val	Pro 105	Arg	Ser	Asn	Phe	Gln 110	Gly	Thr
Lys	Lys	Ser 115	Leu	Leu	Met	Ser	11e 120	Leu	Ala	Leu	Ile	Phe 125	Ile	Met	Gly
Asn	Ser 130	Ala	Lys	Glu	Ala	Leu 135	Val	Trp	Lys	Val	Leu 140	Gly	Lys	Leu	GľÀ
145			_	·	150		Ser			155	-		-	-	160
				165		_	Arg	-	170			-	-	175	
			180				Tyr	185			-	_	190		
		195			-		Lys 200					205		•	
	210					215	Trp				220				
225	Asp	Asp	ALA	Glu	Val 230	GIu	Ala	Ile	Leu	Asn 235	ser	GТĀ	Ala	Arg	Gly 240

<210> 1097

Tyr Ser Ala Pro

<211> 132

<212> PRT

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<213> Homo sapiens
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<400> 1097

Ala Thr Met Val Arg Met Asn Val Leu Ala Asp Ala Leu Lys Ser Ile 1 5 10 15

Asn Asn Ala Glu Lys Arg Gly Lys Arg Gln Val Leu Ile Arg Pro Cys \$20\$

Ser Lys Val Ile Val Arg Phe Leu Thr Val Met Met Lys His Gly Tyr 35 40 45

Ile Gly Glu Phe Glu Ile Ile Asp Asp His Arg Ala Gly Lys Ile Val
50 55 60

Val Asn Leu Thr Gly Arg Leu Asn Lys Cys Gly Val Ile Ser Pro Arg 65 70 75 80

Phe Asp Val Gln Leu Lys Asp Leu Glu Lys Trp Gln Asn Asn Leu Leu 85 90 95

Pro Ser Arg Gln Phe Gly Phe Ile Val Leu Thr Thr Ser Ala Gly Ile
100 105 110

Met Asp His Glu Glu Ala Arg Arg Lys His Thr Gly Gly Lys Ile Leu 115 120 125

Gly Phe Phe Phe

<210> 1098

<211> 371

<212> PRT

<213> Homo sapiens

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<222> (44)

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<220>

<221> SITE

<222> (186)

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<400> 1098

Ala Arg His Thr Pro Ala Gln Arg His Asp His Pro Gln Glu Gly Asn 1 5 10 15

Ile	Pro	Val	. Cys	. Val	. Gln	Leu	Ala	Val	. Cys	Ala	Leu	Pro	Leu	Pro	Va]
			20	•				25	;				30)	
Val	. Pro	Gly 35		Glu	His	Cys	Gly 40		Gln	Arg	, Xaa	Leu 45		Pro	Let
Val	Tyr 50		Leu	Ala	Gln	Val 55		Ile	Gly	Cys	Ile 60		Leu	ılle	Pro
Thr 65		. Arg	Phe	Tyr	Pro 70	Leu	Arg	Met	. His	Cys 75		Arg	Ala	Leu	Thr 80
Leu	Leu	Ser	Gly	Ser 85	Ser	Gly	Ala	Phe	Ile 90		Val	Leu	Pro	Phe 95	
Leu	Glu	Met	Phe 100		Gln	Val	Asp	Phe 105		Arg	Lys	Pro	Gly 110	_	Met
Ser	Ser	Lys 115		Ile	Asn	Phe	Ser 120	Val	Ile	Leu	Lys	Leu 125		Asn	Val
Asn	Leu 130		Glu	Lys	Ala	Tyr 135	Arg	Asp	Gly	Leu	Val 140	Glu	Gln	Leu	Tyr
Asp 145	Leu	Thr	Leu	Glu	Туг 150	Leu	His	Ser	Gln	Ala 155		Cys	Ile	Gly	Phe 160
Pro	Glu	Leu	Val	Leu 165	Pro	Val	Val	Leu	Gln 170	Leu	Lys	Ser	Phe	Leu 175	
Glu	Суѕ	Lys	Val 180	Ala	Asn	Tyr	Cys	Arg 185	Xaa	Val	Gln	Gln	Leu 190	Leu	Gly
Ĺys	Val	Gln 195	Glu	Asn	Ser	Ala	Туг 200	Ile	Суз	Ser	Arg	Arg 205	Gln	Arg	Val
Ser	Phe 210	Gly	Val	Ser	Glu	Gln 215	Gln	Ala	Val	Glu	Ala 220	Trp	Glu	Lys	Leu
Thr 225	Arg	Glu	Glu	Gly	Thr 230	Pro	Leu	Thr	Leu	Туг 235	туг	Ser	His	Trp	Arg 240
Суs	Leu	Arg	Asp	Arg 245	Glu	Ile	Gln	Leu	Glu 250	Ile	Ser	Gly	Lys	Glu 255	Arg
Leu	Glu	Asp	Leu 260	Asn	Phe	Pro	Glu	11e 265	Lys	Arg	Arg	Lys	Met 270	Ala	Asp
rg	Lys	Asp	Glu	Asp	Arg	-	Gln	Phe	Lys	Asp	Leu	Phe	Asp	Leu	Asn

Ser Ser Glu Glu Asp Asp Thr Glu Gly Phe Ser Glu Arg Gly Ile Leu 290 295 300

Arg Pro Leu Ser Thr Arg His Gly Val Glu Asp Asp Glu Glu Asp Glu 305 310 315 320

Glu Glu Gly Glu Glu Asp Ser Ser Asn Ser Glu Gly Glu Trp Ser Trp 325 330 335

Asp Gly Asp Pro Asp Ala Glu Ala Gly Leu Ala Pro Gly Glu Leu Gln 340 345 350

Gln Leu Ala Gln Gly Pro Glu Asp Glu Leu Glu Asp Leu Gln Leu Ser 355 360 365

Glu Asp Asp 370

WO 00/55350

<210> 1099

<211> 321

<212> PRT

<213> Homo sapiens

<400> 1099

Glu Arg Thr Leu Gly Gln Pro Gly Phe Leu Gly Cys Pro Arg Gln Pro 1 5 10 15

His Thr Ala Met His Tyr Pro Thr Ala Leu Leu Phe Leu Ile Leu Ala 20 25 30

Asn Gly Ala Gln Ala Phe Arg Ile Cys Ala Phe Asn Ala Gln Arg Leu 35 40 45

Thr Leu Ala Lys Val Ala Arg Glu Gln Val Met Asp Thr Leu Val Arg 50 55 60

Ile Leu Ala Arg Cys Asp Ile Met Val Leu Gln Glu Val Val Asp Ser 65 70 75 80

Ser Gly Ser Ala Ile Pro Leu Leu Leu Arg Glu Leu Asn Arg Phe Asp 85 90 95

Gly Ser Gly Pro Tyr Ser Thr Leu Ser Ser Pro Gln Leu Gly Arg Ser 100 105 110

Thr Tyr Met Glu Thr Tyr Val Tyr Phe Tyr Arg Ser His Lys Thr Gln 115 120 125

Val Leu Ser Ser Tyr Val Tyr Asn Asp Glu Asp Asp Val Phe Ala Arg

1097

130 135 140 Glu Pro Phe Val Ala Gln Phe Ser Leu Pro Ser Asn Val Leu Pro Ser 150 155 Leu Val Leu Val Pro Leu His Thr Thr Pro Lys Ala Val Glu Lys Glu 170 Leu Asn Ala Leu Tyr Asp Val Phe Leu Glu Val Ser Gln His Trp Gln 180 185 Ser Lys Asp Val Ile Leu Leu Gly Asp Phe Asn Ala Asp Cys Ala Ser 200 Leu Thr Lys Lys Arg Leu Asp Lys Leu Glu Leu Arg Thr Glu Pro Gly 215 Phe His Trp Val Ile Ala Asp Gly Glu Asp Thr Thr Val Arg Ala Ser Thr His Cys Thr Tyr Asp Arg Val Val Leu His Gly Glu Arg Cys Arg Ser Leu Leu His Thr Ala Ala Ala Phe Asp Phe Pro Thr Ser Phe Gln 265 Leu Thr Glu Glu Glu Ala Leu Asn Ile Ser Asp His Tyr Pro Val Glu 280 Val Glu Leu Lys Leu Ser Gln Ala His Ser Val Gln Pro Leu Ser Leu 295 Thr Val Leu Leu Leu Ser Leu Leu Ser Pro Gln Leu Cys Pro Ala Ala

<210> 1100

<211> 60

<212> PRT

<213> Homo sapiens

<400> 1100

Leu Leu Cys Val Phe Tyr Ile Ala Cys Phe Cys Lys Asn Met Leu
1 10 15

Gly Asp Glu Arg Leu Val Leu Glu Arg Lys Cys Ser Ser Val Gln Arg 20 25 30

Met His Phe Leu Pro Leu Ile Leu Glu Lys Thr Phe Thr Val Ile Tyr 35 40 Met Val Phe Cys Lys Arg Thr Ile Asn Arg Thr Phe 55 <210> 1101 <211> 254 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (162) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (170) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1101 Phe Gly Thr Ser Tyr Ile Gly Gly Leu Leu Ser Ala Phe Tyr Leu Thr Gly Glu Glu Val Phe Arg Ile Lys Ala Ile Arg Leu Gly Glu Lys Leu Leu Pro Ala Phe Asn Thr Pro Thr Gly Ile Pro Lys Gly Val Val Ser

35 40 45

Phe Lys Ser Gly Asn Trp Gly Trp Ala Thr Ala Gly Ser Ser Ile 50 55 60

Leu Ala Glu Phe Gly Ser Leu His Leu Glu Phe Leu His Leu Thr Glu 65 70 75 80

Leu Ser Gly Asn Gln Val Phe Ala Glu Lys Val Arg Asn Ile Arg Lys 85 90 95

Val Leu Arg Lys Ile Glu Lys Pro Phe Gly Leu Tyr Pro Asn Phe Leu 100 105 110

Ser Pro Val Ser Gly Asn Trp Val Gln His His Val Ser Val Gly Gly

Leu Gly Asp Ser Phe Tyr Glu Tyr Leu Ile Lys Ser Trp Leu Met Ser 130 135 140

Gly Lys Thr Asp Met Glu Ala Lys Asn Met Tyr Tyr Glu Ala Leu Glu Ala Xaa Arg Asp Leu Leu Ala Glu Cys Xaa Ser Arg Gly Ala Asp Leu 165 170 His Cys Arg Val Ala Arg Gly Asp Ser Gly Pro Gln Asp Gly Ala Pro 180 185 Gly Leu Phe Leu Arg Gly His Asp Arg Pro Trp Pro Glu Asp Ala Lys 200 Glu Glu Lys Arg Ala His Tyr Arg Glu Leu Ala Ala Gln Ile Thr Lys 215 Thr Cys His Glu Ser Tyr Ala Arg Ser Asp Thr Lys Leu Gly Pro Glu Ala Ser Gly Leu Thr Pro Ala Glu Arg Pro Trp Pro Pro Ser 250 <210> 1102 <211> 233 <212> PRT <213> Homo sapiens <400> 1102 Gly Pro Gly Trp Tyr Pro Ala Pro Leu Arg Leu Phe His Ser Asp Pro Trp Gly His Ala Gln Pro Gly Ala Lys Arg His Arg Ile Pro Glu Pro 20 25 Glu Ala Ala Val Leu Phe Arg Gln Met Ala Thr Ala Leu Ala His Cys 40 His Gln His Gly Leu Val Leu Arg Asp Leu Lys Leu Cys Arg Phe Val 55 Phe Ala Asp Arg Glu Arg Lys Lys Leu Val Leu Glu Asn Leu Glu Asp Ser Cys Val Leu Thr Gly Pro Asp Asp Ser Leu Trp Asp Lys His Ala

Cys Pro Ala Tyr Val Gly Pro Glu Ile Leu Ser Ser Arg Ala Ser Tyr 105

1100

Ser Gly Lys Ala Ala Asp Val Trp Ser Leu Gly Val Ala Leu Phe Thr 120 Met Leu Ala Gly His Tyr Pro Phe Gln Asp Ser Glu Pro Val Leu Leu 135 Phe Gly Lys Ile Arg Arg Gly Ala Tyr Ala Leu Pro Ala Gly Leu Ser 150 155 Ala Pro Ala Arg Cys Leu Val Arg Cys Leu Leu Arg Arg Glu Pro Ala 170 165 Glu Arg Leu Thr Ala Thr Gly Ile Leu Leu His Pro Trp Leu Arg Gln 185 Asp Pro Met Pro Leu Ala Pro Thr Arg Ser His Leu Trp Glu Ala Ala Gln Val Val Pro Asp Gly Leu Gly Leu Asp Glu Ala Arg Glu Glu Glu Gly Asp Arg Glu Val Val Leu Tyr Gly 230 <210> 1103 <211> 330 <212> PRT <213> Homo sapiens <400> 1103 Cys Gln Leu Arg Ser Ala Ala Gly Val Pro Ser Ser Val Ser Val Ser Pro Arg Asp Pro Ile Ala Met Glu Leu Ser Asp Ala Asn Leu Gin Thr

Leu Thr Glu Tyr Leu Lys Lys Thr Leu Asp Pro Asp Pro Ala Ile Arg
35 40 45

25

20

Arg Pro Ala Glu Lys Phe Leu Glu Ser Val Glu Gly Asn Gln Asn Tyr 50 55 60

Pro Leu Leu Leu Leu Thr Leu Leu Glu Lys Ser Gln Asp Asn Val Ile 65 70 75 80

Lys Val Cys Ala Ser Val Thr Phe Lys Asn Tyr Ile Lys Arg Asn Trp 85 90 95

Arg Ile Val Glu Asp Glu Pro Asn Lys Ile Cys Glu Ala Asp Arg Val

1101

			100					105					110		
Ala	Ile	Lys 115	Ala	Asn	Ile	Val	His 120	Leu	Met	Leu	Ser	Ser 125	Pro	Glu	Glr
Ile	Gln 130	Lys	Gln	Leu	Ser	Asp 135	Ala	Ile	Ser	Ile	Ile 140	Gly	Arg	Glu	Asp
Phe 145	Pro	Gln	Lys	Trp	Pro 150	Asp	Leu	Leu	Thr	Glu 155	Met	Val	Asn	Arg	Phe 160
Gln	Ser	Gly	Asp	Phe 165	His	Val	Ile	Asn	Gly 170	Val	Leu	Arg	Thr	Ala 175	His
Ser	Leu	Phe	Lys 180	Arg	Tyr	Arg	His	Glu 185	Phe	Lys	Ser	Asn	Glu 190	Leu	Trp
Thr	Glu	Ile 195	Lys	Leu	Val	Leu	Asp 200	Ala	Phe	Ala	Leu	Pro 205	Leu	Thr	Asn
Leu	Phe 210	Lys	Ala	Thr	Ile	Glu 215	Leu	Cys	Ser	Thr	His 220	Ala	Asn	Asp	Ala
Ser 225	Ala	Leu	Arg	Ile	Leu 230	Phe	Ser	Ser	Leu	11e 235	Leu	Ile	Ser	Lys	Leu 240
Phe	Tyr	Ser	Leu	Asn 245	Phe	Gln	Asp	Leu	Pro 250	Glu	Phe	Phe	Glu	Asp 255	Asn
Met	Glu	Thr	Trp 260	Met	Asn	Asn	Phe	His 265	Thr	Leu	Leu	Thr	Leu 270	Asp	Asn
Lys	Leu	Leu 275	Gln	Thr	Asp	Asp	Glu 280	Glu	Glu	Ala	Gly	Leu 285	Leu	Glu	Leu
Leu	Lys 290	Ser	Gln	Ile	Cys	Asp 295	Asn	Ala	Ala	Leu	туr 300	Ala	Gln	Lys	Tyr
Asp 305	Glu	Glu	Phe	G1n	Arg 310	Tyr	Leu	Pro	Arg	Phe 315	Val	Thr	Ala	Ile	Trp 320
Glu	Phe	Thr	Ser	Tyr 325	Asn	Gly	Ser	Arg	Gly 330						

<210> 1104

<211> 180

<212> PRT

<213> Homo sapiens

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<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids
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<400> 1104
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                                     10
Ser Ser Leu Gln Ala Pro Gln Pro Ser Arg Val Pro Trp Pro Met Ala
             20
                                 25
Ala Tyr Ser Tyr Arg Pro Gly Pro Gly Ala Gly Pro Gly Pro Ala Ala
Gly Ala Ala Leu Pro Asp Gln Ser Phe Leu Trp Asn Val Phe Gln Arg
    50
                        55
Val Asp Lys Asp Arg Ser Gly Val Ile Ser Asp Thr Glu Leu Gln Gln
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1103

Ala Leu Ser Asn Gly Thr Trp Thr Pro Phe Asn Pro Val Thr Val Arg
85 90 95

Ser Ile Ile Ser Met Phe Asp Arg Glu Asn Lys Ala Gly Val Asn Phe 100 105 110

Ser Glu Phe Thr Gly Val Trp Lys Tyr Ile Thr Asp Trp Gln Asn Val 115 120 125

Phe Arg Thr Tyr Asp Arg Asp Asn Ser Gly Met Ile Asp Lys Asn Glu 130 135 140

Leu Lys Gln Ala Leu Xaa Val Ser Ala Thr Gly Ser Leu Thr Ser Ser 145 150 155 160

Thr Thr Ser Ser Phe Glu Xaa Leu Thr Gly Xaa Gly Arg Gly Xaa Ser 165 170 175

Xaa Ser Thr Xaa 180

<210> 1105

<211> 241

<212> PRT

<213> Homo sapiens

<400> 1105

Thr Thr Arg Phe Pro Ser Gly Gln Pro Leu Lys Pro Arg Pro Thr Leu 1 5 10 15

Thr Ala Ala Gly Pro Arg Pro Gly Leu Leu Cys Phe Thr Ile Tyr Ile 20 25 30

Met Asn Pro Ser Met Lys Gln Lys Gln Glu Glu Ile Lys Glu Asn Ile 35 40 45

Lys Asn Ser Ser Val Pro Arg Arg Thr Leu Lys Met Ile Gln Pro Ser 50 60

Ala Ser Gly Ser Leu Val Gly Arg Glu Asn Glu Leu Ser Ala Gly Leu 65 70 75 . 80

Ser Lys Arg Lys His Arg Asn Asp His Leu Thr Ser Thr Thr Ser Ser 85 90 95

Pro Gly Val Ile Val Pro Glu Ser Ser Glu Asn Lys Asn Leu Gly Gly

Val Thr Gln Glu Ser Phe Asp Leu Met Ile Lys Glu Asn Pro Ser Ser

1104

125 115 120 Gln Tyr Trp Lys Glu Val Ala Glu Lys Arg Arg Lys Ala Leu Tyr Glu 140 135 130 Ala Leu Lys Glu Asn Glu Lys Leu His Lys Glu Ile Glu Gln Lys Asp 155 150 Asn Glu Ile Ala Arg Leu Lys Lys Glu Asn Lys Glu Leu Ala Glu Val 170 Ala Glu His Val Gln Tyr Met Ala Glu Leu Ile Glu Arg Leu Asn Gly 185 Glu Pro Leu Asp Asn Phe Glu Ser Leu Asp Asn Gln Glu Phe Asp Ser 200 Glu Glu Glu Thr Val Glu Asp Ser Leu Val Glu Asp Ser Glu Ile Gly Thr Cys Ala Glu Gly Thr Val Ser Ser Ser Thr Asp Ala Lys Pro Cys 230 235 Ile <210> 1106 <211> 88 <212> PRT <213> Homo sapiens <400> 1106 Phe His Thr Glu Phe Ile Thr Ile Trp Asp Val Arg Gln Cys Ser Asn Lys His Cys Gln His Val Asn Phe Leu Lys Ser Val Gly His Ile Ala 25 Lys Asn Leu Leu Lys His Asn Cys Ile Phe Cys Phe Arg Ala Leu Leu 40 Met Phe Cys Arg Ser Asn Val Cys Ile Phe Leu Leu Asn Lys Leu Val 55 Leu Ile Leu Glu Leu Ser Asp Asp Phe Val Leu Glu Arg Thr Thr Gln Arg Arg Gln Cys Lys Ser Lys Ser

PCT/US00/05882

<210> 1107 <211> 124 <212> PRT <213> Homo sapiens <400> 1107 Leu Val Val Leu Lys Arg Arg Pro Glu Lys Ser Gln Gly His Glu His Arg Ala Met Pro Phe Leu Asp Ile Gln Lys Arg Phe Gly Leu Asn Ile 25 Asp Arg Trp Leu Thr Ile Gln Ser Gly Glu Gln Pro Tyr Lys Met Ala Gly Arg Cys His Ala Phe Glu Lys Glu Trp Ile Glu Cys Ala His Gly Ile Gly Tyr Thr Arg Ala Glu Lys Glu Cys Lys Ile Glu Tyr Asp Asp 70 Phe Val Glu Cys Leu Leu Arg Gln Lys Thr Met Arg Arg Ala Gly Thr 90 85 Ile Arg Lys Gln Arg Asp Lys Leu Ile Lys Glu Gly Lys Tyr Thr Pro 100 105 Pro Pro His His Ile Gly Lys Gly Glu Pro Arg Pro 120 <210> 1108 <211> 299 <212> PRT <213> Homo sapiens

<222> (186)
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<400> 1108

<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (32)

<220> <221> SITE

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Ala	Arg	Gly	Leu 20		Pro	Ala	Gln	Arg 25		Phe	Glu	Asp	Ala 30		Xaa
Pro	Pro	Leu 35	Leu	Leu	Ala	Ala	Val 40		Leu	Gly	Leu	Val 45		Leu	Val
Val	Leu 50		Leu	Leu	Leu	Arg 55		Trp	Gly	Trp	G1y 60	Leu	Cys	Leu	Ile
Gly 65		Asn	Glu	Phe	Ile 70	Leu	Gln	Pro	Ile	His 75		Leu	Leu	Met	Gly 80
Asp	Thr	Lys	Glu	G1n 85	Arg	Ile	Leu	Asn	His 90		Leu	Gln	His	Ala 95	Glu
Pro	Gly	Asn	Ala 100		Ser	Val	Leu	Glu 105		Ile	Asp	Thr	Туг 110		Glu
Gln	Lys	Glu 115	Trp	Ala	Met	Asn	Val 120	Gly	Asp	ГÀЗ	Lys	Gly 125	Lys	Ile	Val
Asp	Ala 130		Ile	Gln	Glu	His 135	Gln	Pro	Ser	Val	Leu 140	Leu	Glu	Leu	Gly
Ala 145	Туr	Cys	Gly	Tyr	Ser 150	Ala	Val	Arg	Met	Ala 155	Arg	Leu	Leu	Ser	Pro 160
Gly	Ala	Arg	Leu	11e 165	Thr	Ile	Glu	Ile	Asn 170	Pro	Asp	Суѕ	Ala	Ala 175	Ile
			Met 180					185					190		
		195	Ala				200					205			
	210		Thr			215					220				
Tyr 225	Leu	Pro	Asp	Thr	Leu 230	Leu	Leu	Glu	Glu	Сув 235	Gly	Leu	Leu	Arg	Lys 240
			Leu	245					250					255	
Phe	Leu	Ala	His 260	Val	Arg	Gly	Ser	Ser 265	Cys	Phe	Glu	Cys	Thr 270	His	Tyr

Gln Ser Phe Leu Glu Tyr Arg Glu Val Val Asp Gly Leu Glu Lys Ala 275 280 285

Ile Tyr Lys Gly Pro Gly Ser Glu Ala Gly Pro
290
295

<210> 1109

<211> 300

<212> PRT

<213> Homo sapiens

<220>

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<222> (43)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1109

Trp Ile Pro Arg Ala Ala Gly Ile Arg His Glu Arg Leu Arg Asp Leu 1 5 10 15

Leu Thr Arg Arg Leu Thr Gly Ser Asn Tyr Pro Gly Leu Ser Ile Ser 20 25 30

Leu Arg Leu Thr Gly Ser Ser Ala Gln Glu Xaa Ala Ser Gly Val Ala 35 40 45

Leu Gly Glu Ala Pro Asp His Ser Tyr Glu Ser Leu Arg Val Thr Ser

Ala Gln Lys His Val Leu His Val Gln Leu Asn Arg Pro Asn Lys Arg 65 70 75 80

Asn Ala Met Asn Lys Val Phe Trp Arg Glu Met Val Glu Cys Phe Asn 85 90 95

Lys Ile Ser Arg Asp Ala Asp Cys Arg Ala Val Val Ile Ser Gly Ala 100 105 110

Gly Lys Met Phe Thr Ala Gly Ile Asp Leu Met Asp Met Ala Ser Asp 115 120 125

Ile Leu Gln Pro Lys Gly Asp Asp Val Ala Arg Ile Ser Trp Tyr Leu 130 135 140

Arg Asp Ile Ile Thr Arg Tyr Gln Glu Thr Phe Asn Val Ile Glu Arg

Cys Pro Lys Pro Val Ile Ala Ala Val His Gly Gly Cys Ile Gly Gly 165 170 175

Gly	Val	Asp	Leu 180	Val	Thr	Ala	Cys	Asp 185	Ile	Arg	Tyr	Cys	Ala 190	Gln	Asp
Ala	Phe	Phe 195	Gln	Val	Lys	Glu	Val 200	Asp	Val	Gly	Leu	Ala 205	Ala	Asp	Va1
Gly	Thr 210	Leu	Gln	Arg	Leu	Pro 215	Lys	Val	Ile	Gly	Asn 220	Gln	Ser	Leu	Val
Asn 225	Glu	Leu	Ala	Phe	Thr 230	Ala	Arg	Lys	Met	Met 235	Ala	Asp	Glu	Ala	Leu 240
Gly	Ser	Gly	Leu	Val 245	Ser	Arg	Val	Phe	Pro 250	Asp	Lys	Glu	Val	Met 255	Leu
Asp	Ala	Ala	Leu 260	Ala	Leu	Ala	Ala	Glu 265	Ile	ser	Ser	Lys	Ser 270	Pro	Val
Ala	Cys	Arg 275	Ala	Pro	Arg	ser	Thr 280	Cys	Cys	Ile	Pro	Ala 285	Thr	Ile	Arg
Trp	Pro 290	Arg	Ala	Ser	Thr	Thr 295	Trp	Arg	Pro	Gly	Thr 300				
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<210> 1110 <211> 230															
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<213	3> Hc	omo s	apie	ens											
<400)> 11	10													
Arg	Ser	Суз	Ala		Val	Cys	ГÀЗ	His	Trp	Tyr	Arg	Cys	Leu		Gly
1				5					10					15	
Asp	Glu	Asn	Ser 20	Glu	Val	Trp	Arg	Ser 25	Leu	Cys	Ala	Arg	Ser 30	Leu	Ala
Glu	Glu	Ala 35	Leu	Arg	Thr	Asp	Ile 40	Leu	Cys	Asn	Leu	Pro 45	ser	Tyr	Lys

Ala Lys Ile Arg Ala Phe Gln His Ala Phe Ser Thr Asn Asp Cys Ser

Arg Asn Val Tyr Ile Lys Lys Asn Gly Phe Thr Leu His Arg Asn Pro

Ile Ala Gln Ser Thr Asp Gly Ala Arg Thr Lys Ile Gly Phe Ser Glu

90

55

70

1109

Gly Arg His Ala Trp Glu Val Trp Trp Glu Gly Pro Leu Gly Thr Val 100 105 Ala Val Ile Gly Ile Ala Thr Lys Arg Ala Pro Met Gln Cys Gln Gly 120 Tyr Val Ala Leu Leu Gly Ser Asp Asp Gln Ser Trp Gly Trp Asn Leu 135 Val Asp Asn Asn Leu Leu His Asn Gly Glu Val Asn Gly Ser Phe Pro 155 Gln Cys Asn Asn Ala Pro Lys Tyr Gln Ile Gly Glu Arg Ile Arg Val 165 170 Ile Leu Asp Met Glu Asp Lys Thr Leu Ala Phe Glu Arg Gly Tyr Glu 185 Phe Leu Gly Val Ala Phe Arg Gly Leu Pro Lys Val Cys Leu Tyr Pro 200 Ala Val Ser Ala Val Tyr Gly Asn Thr Glu Val Thr Leu Val Tyr Leu 215 Gly Lys Pro Leu Asp Gly 225 <210> 1111 <211> 59 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (2) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (11) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (16) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1111 Pro Xaa Leu Thr Lys Gly Asn Lys Ser Trp Xaa Ser Thr Ala Val Xaa

1110

10 15 Thr Ala Leu Glu Leu Val Asp Pro Pro Gly Cys Arg Asn Ser Ala Pro Gln Lys Asn Leu Lys Asn Thr Val Phe Cys Ile Asp Ile Cys Thr Val 40 Cys Val Cys Val Cys Glu Ile Lys Ile Arg Phe 50 55 <210> 1112 <211> 425 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (3) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (228) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1112 Cys Ile Xaa Gly Phe Tyr Phe Ala Val Leu Ala Pro Gln Glu Leu Leu Ile Tyr Glu Met Ala Glu Asn Gly Lys Asn Cys Asp Gln Arg Arg Val 20 25 30 Ala Met Asn Lys Glu His His Asn Gly Asn Phe Thr Asp Pro Ser Ser Val Asn Glu Lys Lys Arg Arg Glu Arg Glu Glu Arg Gln Asn Ile Val 55 Leu Trp Arg Gln Pro Leu Ile Thr Leu Gln Tyr Phe Ser Leu Glu Ile Leu Val Ile Leu Lys Glu Trp Xaa Ser Lys Leu Trp His Arg Gln Ser 85 90 95

Ile	Val	Val	Ser 100		Leu	Leu	Leu	Leu 105		Val	Leu	Ile	Ala 110	Thr	Tyr
туr	Val	Glu 115	Gly	Val	His	Gln	Gln 120	_	Val	Gln	Arg	Ile 125	Glu	Lys	Gln
Phe	Leu 130	Leu	Tyr	Ala	Tyr	Trp 135	Ile	Gly	Leu	Gly	Ile 140		Ser	Ser	Val
Gly 145	Leu	Gly	Thr	Gly	Leu 150	His	Thr	Phe	Leu	Leu 155		Leu	Gly	Pro	Нis 160
Ile	Ala	Ser	Val	Thr 165	Leu	Ala	Ala	Tyr	Glu 170	Cys	Asn	Ser	Val	Asn 175	Phe
Pro	Glu	Pro	Pro 180	Tyr	Pro	Asp	Gln	Ile 185		Cys	Pro	Asp	Glu 190	Glu	Gly
Thr	Glu	Gly 195	Thr	Ile	ser	Leu	Trp 200	Ser	Ile	Ile	Ser	Lys 205	Val	Arg	Ile
Glu	Ala 210	Cys	Met	Trp	Gly	Ile 215	Gly	Thr	Ala	Ile	Gly 220	Glu	Leu	Pro	Pro
Tyr 225	Phe	Met	Хаа	Arg	Ala 230	Ala	Arg	Leu	Ser	Gly 235	Ala	Glu	Pro	Asp	Asp 240
Glu	Glu	туr	Gln	Glu 245	Phe	Glu	Glu	Met	Leu 250	Glu	His	Ala	Glu	Ser 255	Ala
Gln	Asp	Phe	Ala 260	Ser	Arg	Ala	Lys	Leu 265	Ala	Val	Gln	Lys	Leu 270	Val	Gln
Lys	Val	Gly 275	Phe	Phe	Gly	Ile	Leu 280	Ala	Суз	Ala	Ser	Ile 285	Pro	Asn	Pro
Leu	Phe 290	Asp	Leu	Ala	Gly	Ile 295	Thr	Cys	Gly	His	Phe 300	Leu	Val	Pro	Phe
Trp 305	Thr	Phe	Phe	Gly	Ala 310	Thr	Leu	Ile	Gly	Lys 315	Ala	Ile	Ile	Lys	Met 320
His	Ile	Gln	Lys	11e 325	Phe	Val	Ile	lle	Thr 330	Phe	Ser	Lys	His	11e 335	Val
3lu	Gln	Met	Val 340	Ala	Phe	Ile	Gly	Ala 345	Val	Pro	Gly	Ile	Gly 350	Pro	Ser
Leu	Gln	Lys 355	Pro	Phe	Gln	Glu	Tyr 360	Leu	Glu	Ala	Gln	Arg 365	Gln	Lys	Leu

His His Lys Ser Glu Met Gly Thr Pro Gln Gly Glu Asn Trp Leu Ser 370 375 380

Trp Met Phe Glu Lys Leu Val Val Val Met Val Cys Tyr Phe Ile Leu 385 390 395 400

Ser Ile Ile Asn Ser Met Ala Gln Ser Tyr Ala Lys Arg Ile Gln Gln 405 410 415

Arg Leu Asn Ser Glu Glu Lys Thr Lys 420 425

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<211> 254

<212> PRT

<213> Homo sapiens

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<400> 1113

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Pro Arg Cys Gly Arg Ser Arg Thr Ser Gly Ser Pro Gly Leu Gln Glu 20 25 30

Phe Gly Thr Ser Ser Ser Thr Pro Ala Arg Pro Ser Ser His His Ser

Ala Cys Phe Leu Gly Pro Glu Ile Met Pro Leu Gly Leu Leu Trp Leu 50 55 60

Gly Leu Ala Leu Leu Gly Ala Leu His Ala Gln Ala Gln Asp Ser Thr
65 70 75 80

Ser Asp Leu Ile Pro Ala Pro Pro Leu Ser Lys Val Pro Leu Gln Gln 85 90 95

Asn Phe Gln Asp Asn Gln Phe Gln Gly Lys Trp Tyr Val Val Gly Leu

Ala Gly Asn Ala Ile Leu Arg Glu Asp Lys Asp Pro Gln Lys Met Tyr 115 120 125

Ala Thr Ile Tyr Glu Leu Lys Glu Asp Lys Ser Tyr Asn Val Thr Ser

1113

140

135

130

Val Leu Phe Arg Lys Lys Cys Asp Tyr Trp Ile Arg Thr Phe Val 150 155 Pro Gly Cys Gln Pro Gly Glu Phe Thr Leu Gly Asn Ile Lys Ser Tyr 170 Pro Gly Leu Thr Ser Tyr Leu Val Arg Val Val Ser Thr Asn Tyr Asn 185 Gln His Ala Met Val Phe Phe Lys Lys Val Ser Gln Asn Arg Glu Tyr 200 Phe Lys Ile Thr Leu Tyr Gly Arg Thr Lys Glu Leu Thr Ser Glu Leu 215 Lys Glu Asn Phe Ile Arg Phe Ser Lys Ser Leu Gly Leu Pro Glu Asn 230 235 His Ile Val Phe Pro Val Pro Ile Asp Gln Cys Ile Asp Gly 245 250 <210> 1114 <211> 248 <212> PRT <213> Homo sapiens <400> 1114 Ala Ser Glu Glu Ala Asn Pro Ala Gly Ile Arg Ala Ile Arg Thr Ala Thr Met Thr Val Gly Lys Ser Ser Lys Met Leu Gln His Ile Asp Tyr Arg Met Arg Cys Ile Leu Gln Asp Gly Arg Ile Phe Ile Gly Thr Phe 35 40 Lys Ala Phe Asp Lys His Met Asn Leu Ile Leu Cys Asp Cys Asp Glu Phe Arg Lys Ile Lys Pro Lys Asn Ser Lys Gln Ala Glu Arg Glu Glu 65 70 75 Lys Arg Val Leu Gly Leu Val Leu Leu Arg Gly Glu Asn Leu Val Ser

Met Thr Val Glu Gly Pro Pro Pro Lys Asp Thr Gly Ile Ala Arg Val

105

Pro Leu Ala Gly Ala Ala Gly Gly Pro Gly Ile Gly Arg Ala Ala Gly 120 Arg Gly Ile Pro Ala Gly Val Pro Met Pro Gln Ala Pro Ala Gly Leu 135 Ala Gly Pro Val Arg Gly Val Gly Gly Pro Ser Gln Gln Val Met Thr Pro Gln Gly Arg Gly Thr Val Ala Ala Ala Ala Ala Ala Ala Thr Ala 165 Ser Ile Ala Gly Ala Pro Thr Gln Tyr Pro Pro Gly Arg Gly Gly Pro 185 Pro Pro Pro Met Gly Arg Gly Ala Pro Pro Pro Gly Met Met Gly Pro 195 200 205 Pro Pro Gly Met Arg Pro Pro Met Gly Pro Pro Met Gly Ile Pro Pro 215 Gly Arg Gly Thr Pro Met Gly Met Pro Pro Pro Gly Met Arg Pro Pro 230 235 Pro Pro Gly Met Arg Gly Leu Leu 245

<211> 777 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (5) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (9) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (14) <223> Xaa equals any of the naturally occurring L-amino acids <220>

<210> 1115

	1> s														
	2> (7 A						4.
<22	3> X	aa e	qual	s an	у от	tne	nat	uraı	ту о	ccur	ring	L-a	mıno	acı	us
<22	٥.														
	1> s	TOR													
	2> (
		•	qual	~ 25	,, of	+ha	nat	11731	1 17 0	cenr	rina	T2	mino	aci	de
-22	J- A	aa e	quar	s an	y OL	CHE	Hat	urar	ry O	ccur	119	D-0		401	4.5
<4n	0> 1	115													
			Gly	Vaa	Ture	Sar	Trn	Vaa	Sor	Thr	Δ1=	17a 1	Yaa	ጥh r	Δ 1:
Leu 1		цур	GIY	7.aa 5		Der	TIP	naa	10	1111	1114	Val	mua	15	23.2.0
•				,					10						
T.011	Glu	T.eu	Val	Yaa	Pro	Pro	Glv	Cve	Ara	Acn	Ser	Δla	Ara	Ala	Xaa
DCu	GIU	cu	20		110	110	01	25	**** 9	11011			30		
			20					2.5							
Pro	Pro	T.en	Gly	Ser	Ser	Pro	T.em	G1v	Ara	Arg	Phe	Ara	۷a٦	Leu	Set
		35	_		501		40	1		••••		45			
Ser	T.011	Ara	Arg	Ser	Pro	Met	Phe	Glu	ផ្សារ	T.vs	Ala	Ser	Ser	Pro	Ser
	50	_		~~_		55		0		-,-	60				
	30														
Glv	T.vs	Met	Gly	Glv	Glu	Glu	Lvs	Pro	Tle	Glv	Ala	Glv	Glu	Glu	Lvs
65	-72			1	70		-12			75		1			80
0.5					. •					, ,					-
GIn	Tvs	Glu	Gly	Glv	Lvs	Lvs	Lvs	Asn	Lvs	Glu	Glv	Ser	Glv	Asp	Gls
	,-		1	85		_,_			90		1			95	
Glv	Ara	Δla	Glu	T.en	Asn	Pro	Фrp	Pro	Glu	Tvr	Ile	Tvr	Thr	Ara	Lei
1	9	••••	100					105		-2-		-1 -	110		
Glu	Met	Tvr	Asn	Ile	Leu	Lvs	Ala	Glu	His	Asp	Ser	Ile	Leu	Ala	Glı
		115				-2-	120					125			
Lys	Ala	Glu	Lys	Asp	Ser	Lys	Pro	Ile	Lys	Val	Thr	Leu	Pro	qaA	Gly
-	130					135			•		140			-	-
Lys	Gln	Val	Asp	Ala	Glu	Ser	Trp	Lys	Thr	Thr	Pro	Tyr	Gln	Ile	Ala
145			-	-	150		-	•		155		•			160
Cys	Gly	Ile	Ser	Gln	Gly	Leu	Ala	Asp	Asn	Thr	Val	Ile	Ala	Lys	Va]
•	3			165	4			•	170					175	
Asn	Asn	Val	Val	Tro	Asp	Leu	Asp	Arq	Pro	Leu	Glu	Glu	Asp	Cvs	Thr
			180	<u>F</u>			L	185					190	- 4	
Leu	Glu	Leu	Leu	Lvs	Phe	Glu	Asp	Glu	Glu	Ala	Gln	Ala	Val	Tyr	Trr
		195		-1-			200					205	-	•	
							, -								
His	Ser	Ser	Ala	His	Ile	Met	Gly	Glu	Ala	Met	Glu	Arg	Val	Tyr	Glv
	210					215	•				220	-		-	-

Gly 225	Cys	Leu	Сув	Tyr	Gly 230		Pro	Ile	Glu	Asn 235		Phe	Tyr	Туг	Asp 240
Met	Tyr	Leu	Glu	Glu 245	-	Gly	Val	Ser	Ser 250		Asp	Phe	Ser	Ser 255	
Glu	Ala	Leu	Cys 260		Lys	Ile	Ile	Lys 265		Lys	Gln	Ala	Phe 270		Arg
Leu	Glu	Val 275	_	Lys	Glu	Thr	Leu 280		Ala	Met	Phe	Lys 285		Asn	Lys
Phe	Lys 290	Cys	Arg	Ile	Leu	Asn 295	Glu	Lys	Val	Asn	Thr 300		Thr	Thr	Thr
Val 305		Arg	Cys	Gly	Pro 310	Leu	Ile	Asp	Leu	Cys 315		Gly	Pro	His	Val 320
Arg	His	Thr	Gly	Lys 325		Lys	Ala	Leu	Lys 330		His	Lys	Asn	Ser 335	
Thr	Tyr	Trp	Glu 340	Gly	Lys	Ala	Asp	Met 345	Glu	Thr	Leu	Gln	Arg 350	Ile	Tyr
Gly	Ile	Ser 355	Phe	Pro	Asp	Pro	Lys 360	Met	Leu	Lys	Glu	Trp 365	Glu	Lys	Phe
Gln	Glu 370	Glu	Ala	Lys	Asn	Arg 375	Asp	His	Arg	Lys	Ile 380	Gly	Arg	Asp	Gln
Glu 385	Leu	Tyr	Phe	Phe	His 390	Glu	Leu	Ser	Pro	Gly 395	Ser	Сув	Phe	Phe	Leu 400
Pro	Lys	Gly	Ala	Tyr 405	Ile	Tyr	Asn	Ala	Leu 410	Ile	Glu	Phe	Ile	Arg 415	Ser
Glu	Tyr	Arg	Lys 420	Arg	Gly	Phe	Gln	G1u 425	Val	Val	Thr	Pro	Asn 430	Ile	Phe
Asn	Ser	Arg 435	Leu	Trp	Met	Thr	Ser 440	Gly	His	Trp	Gln	His 445	Туг	Ser	Glu
Asn	Met 450	Phe	Ser	Phe	Glu	Val 455	Glu	Lys	Glu	Leu	Phe 460	Ala	Leu	Lys	Pro
1et 165	Asn	Cys	Pro	Gly	His 470	Cys	Leu	Met	Phe	Asp 475	His	Arg	Pro	Arg	Ser 480
rp	Arg	Glu			Leu	-	Leu		Asp 490		Gly	Val	Leu	His 495	Arg

Asn	ı Glu	Leu	500	_	ALA	Leu	Tnr	505		ı Tnr	Arg	yaı	510		Pne
Gln	Gln	Asp 515		Ala	His	Ile	Phe 520		Ala	Met	: Glu	Gln 525		Glu	Asp
Glu	11e 530	_	Gly	Cys	Leu	Asp 535	Phe	Leu	Arg	Thr	Val 540		Ser	Val	Phe
Gly 545		Ser	Phe	Lys	Leu 550		Leu	Ser	Thr	555		Glu	Lys	Phe	Leu 560
Gly	Asp	Ile	Glu	Val 565	_	Asp	Gln	Ala	. Glu 570		Gln	Leu	Glu	Asn 575	
Leu	Asn	Glu	Phe 580	_	Glu	Lys	Trp	G1u 585		Asn	Ser	Gly	Asp 590		Ala
Phe	Tyr	Gly 595		Lys	Ile	Asp	11e 600		Ile	Lys	Asp	Ala 605		Gly	Arg
Туг	His 610	Gln	Cys	Ala	Thr	Ile 615	Gln	Leu	Asp	Phe	Gln 620		Pro	Ile	Arg
625					630		His			635					640
Val	Ile	Val	His	Arg 645	Ala	Ile	Leu	Gly	Ser 650		Glu	Arg	Met	11e 655	Ala
Ile	Leu	Thr	Glu 660	Asn	Tyr	Gly	Gly	Lys 665	_	Pro	Phe	Trp	Leu 670	Ser	Pro
Arg	Gln	Val 675	Met	Val	Val	Pro	Val 680	Gly	Pro	Thr	Cys	Asp 685		Tyr	Ala
Gln	Lys 690	Val	Arg	Gln	Gln	Phe 695	His	Asp	Ala	Lys	Phe 700	Met	Ala	Asp	Ile
Asp 705	Leu	Asp	Pro	Gly	Cys 710	Thr	Leu	Asn	Lys	Lys 715	Ile	Arg	Asn	Ala	Gln 720
				725			Leu		730					735	
			740				Thr	745					750		
Arg	Thr	Ile		Glu	Thr		Glu 760	_	Leu	Gln		Leu 765	_	Glu	Phe

Arg Ser Lys Gln Ala Glu Glu Glu Phe

WO 00/55350

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770
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 <211> 360
 <212> PRT
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<400> 1116
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Arg Thr Xaa Gly Phe Gly Asn Leu Ser Ile Thr Gln Xaa Trp Met Met
             20
                                 25
Trp Ala Met Val Ser Xaa Met Glu Ile Asp Gln Pro Ala Gly Thr Gly
                             40
Thr Leu Ser Arg Thr Asn Pro Pro Thr Gln Lys Pro Pro Ser Pro Pro
     50
                                             60
                        55
Met Ser Gly Arg Gly Thr Leu Gly Arg Asn Thr Pro Tyr Lys Thr Leu
Glu Pro Val Lys Pro Pro Thr Val Pro Asn Asp Tyr Met Thr Ser Pro
                                   90
Ala Arg Leu Gly Ser Gln His Ser Pro Gly Arg Thr Ala Ser Leu Asn
```

			100					105					110		
Gln	Arg	Pro 115	-	Thr	His	Ser	Gly 120		Ser	Gly	Gly	Ser 125	_	Ser	Arç
Glu	Asn 130		Gly	Ser	Ser	Ser 135	Ile	Gly	Ile	Pro	Ile 140	Ala	Val	Pro	Thr
Pro 145	Ser	Pro	Pro	Thr	Ile 150	Gly	Pro	Ala	Ala	Pro 155		Ser	Ala	Pro	Gly 160
Ser	Gln	Tyr	Gly	Thr 165		Thr	Arg	Gln	Ile 170		Arg	His	Asn	Ser 175	Thr
Thr	Ser	Ser	Thr 180		Ser	Gly	Gly	Туг 185		Arg	Thr	Pro	Ser 190	Val	Thi
Ala	Gln	Phe 195	Ser	Ala	Gln	Pro	His 200	Val	Asn	Gly	Gly	Pro 205	Leu	Tyr	Ser
Gln	Asn 210	Ser	Ile	Ser	Ile	Ala 215	Pro	Pro	Pro	Pro	Pro 220	Met	Pro	Gln	Leu
Thr 225	Pro	Gln	Ile	Pro	Leu 230	Thr	Gly	Phe	Val	Ala 235	Arg	Val	Gln	Glu	Asn 240
Ile	Ala	Asp	Ser	Pro 245	Thr	Pro	Pro	Pro	Pro 250	Pro	Pro	Pro	Asp	Asp 255	Ile
Pro	Met	Phe	Asp 260	Asp	Ser	Pro	Pro	Pro 265	Pro	Pro	Pro	Pro	Pro 270	Val	Asp
Tyr	Glu	Asp 275	Glu	Glu	Ala	Ala	Val 280	Val	Gln	Tyr	Asn	Asp 285	Pro	Tyr	Ala
Asp	Gly 290	Asp	Pro	Ala	Trp	Ala 295	Pro	Lys	Asn	Tyr	Ile 300	Glu	Lys	Val	Val
Ala 305	Ile	туг	Asp	Tyr	Thr 310	Lys	Asp	Lys	Asp	Asp 315	Glu	Leu	Ser	Phe	Met 320
3lu	Gly	Ala	Ile	11e 325	Tyr	Val	Ile	Lys	Lys 330	Asn	Asp	Asp	Gly	Trp 335	Туг
lu	Gly	Val	Cys 340	Asn	Arg	Val	Thr	Gly 345	Leu	Phe	Pro	Gly	Asn 350	Tyr	Val
lu	Ser	Ile	Met	His	Tyr	Thr	Asp								

1120

<210> 1117 <211> 89 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (86) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1117 Pro Ala Arg Leu Gly Ile Thr Cys His Ser Pro Ala Ile Leu Ser Thr Ala Leu Trp Gly Gly Ser Ser Pro Ile Pro Asp Ala Pro Thr Thr Gln Trp Lys Val Thr Lys Pro Ala Pro Cys Pro Arg Pro Arg Arg Val Glu 40 Pro Val Cys Ser Gly Leu Gln Ala Gln Ile Leu His Cys Tyr Arg Asp 55 Arg Pro His Glu Val Leu Leu Cys Ser Asp Leu Val Lys Ala Tyr Gln Arg Cys Val Ser Ala Xaa His Lys Gly 85

<210> 1118 <211> 347 <212> PRT

<213> Homo sapiens

<400> 1118

Arg Gly Val Val Asp Ser Glu Asp Leu Pro Leu Asn Ile Ser Arg Glu
1 10 15

Met Leu Gln Gln Ser Lys Ile Leu Lys Val Ile Arg Lys Asn Ile Val $20 \hspace{1.5cm} 25 \hspace{1.5cm} 30$

Lys Lys Cys Leu Glu Leu Phe Ser Glu Leu Ala Glu Asp Lys Glu Asn $35 \hspace{1cm} 40 \hspace{1cm} 45$

Tyr Lys Lys Phe Tyr Glu Ala Phe Ser Lys Asn Leu Lys Leu Gly Ile 50 $\,$

His Glu Asp Ser Thr Asn Arg Arg Leu Ser Glu Leu Leu Arg Tyr

65					70					75					80	
His	Thr	Ser	Gln	Ser 85	-	Asp	Glu	Met	Thr		Leu	Ser	Glu	Туг 95	Val	
Ser	Arg	Met	Lys 100		Thr	Gln	Lys	Ser 105		Tyr	туг	Ile	Thr 110	_	Glu	
Ser	Lys	Glu 115		Val	Ala	Asn	Ser 120	Ala	Phe	Val	Glu	Arg 125		Arg	Lys	
Arg	Gly 130		Glu	Val	Val	туr 135	Met	Thr	Glu	Pro	Ile 140	_	Glu	Tyr	Cys	
Val 145	Gln	Gln	Leu	Lys	Glu 150	Phe	Asp	Gly	Lys	Ser 155		Val	Ser	Val	Thr 160	
Lys	Glu	Gly	Leu	Glu 165	Leu	Pro	Glu	Asp	Glu 170		Glu	Lys	Lys	Lys 175	Met	
Glu	Glu	Ser	Lys 180	Ala	Lys	Phe	Glu	Asn 185	Leu	Cys	Lys	Leu	Met 190	Lys	Glu	
Ile	Leu	Asp 195	Lys	Lys	Val	Glu	Lys 200	Val	Thr	Ile	Ser	Asn 205	Arg	Leu	Val	
Ser	Ser 210	Pro	Cys	Cys	Ile	Val 215	Thr	Ser	Thr	Tyr	Gly 220	Trp	Thr	Ala	Asn	
Met 225	Glu	Arg	Ile	Met	Lys 230	Ala	Gln	Ala	Leu	Arg 235	Asp	Asn	Ser	Thr	Met 240	
Gly	Tyr	Met	Met	Ala 245	_. Lys	Lys	His	Leu	Glu 250	Ile	Asn	Pro	Asp	His 255	Pro	
Ile	Val	Glu	Thr 260	Leu	Arg	Gln	Lys	Ala 265	Glu	Ala	Asp	Lys	Asn 270	Asp	Lys	
Ala	Val	Lys 275	Asp	Leu	Val	Val	Leu 280	Leu	Phe	Glu	Thr	Ala 285	Leu	Leu	Ser	
	Gly 290	Phe	Ser	Leu	G1u	Asp 295	Pro	Gln	Thr	His	Ser 300	Asn	Arg	Ile	Tyr	
Arg 305	Met	Ile	Lys	Leu	Gly 310	Leu	Gly	Ile	Asp	Glu 315	Asp	Glu	Val	Ala	Ala 320	
				325	Ala	Val	Pro	Asp	G1u 330	Ile	Pro	Pro	Leu	Glu 335	Gly	
	~1	h	71-	C	70	20-1	~ 7	~ 1	**- 7							

1122

340 345

<210> 1119

<211> 293

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (170)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1119

Pro Gly Ser Pro Asp Val Asn Arg Ala Val Val Arg Pro Pro Pro Pro 1 5 10 15

Pro Pro Pro Pro Pro Pro Ala Pro Gln Pro Thr Met Ser Arg Arg Lys
20 25 30

Gln Gly Lys Pro Gln His Leu Ser Lys Arg Glu Phe Ser Pro Glu Pro 35 40 45

Leu Glu Ala Ile Leu Thr Asp Asp Glu Pro Asp His Gly Pro Leu Gly 50 55 60

Ala Pro Glu Gly Asp His Asp Leu Leu Thr Cys Gly Gln Cys Gln Met 65 70 75 80

Asn Phe Pro Leu Gly Asp Ile Leu Ile Phe Ile Glu His Lys Arg Lys 85 90 95

Gln Cys Asn Gly Ser Leu Cys Leu Glu Lys Ala Val Asp Lys Pro Pro 100 105 110

Ser Pro Ser Pro Ile Glu Met Lys Lys Ala Ser Asn Pro Val Glu Val 115 120 125

Gly Ile Gln Val Thr Pro Glu Asp Asp Cys Leu Ser Thr Ser Ser 130 135 140

Arg Gly Ile Cys Pro Lys Gln Glu His Ile Ala Asp Lys Leu Leu His 145 150 155 160

Trp Arg Gly Leu Ser Ser Pro Arg Ser Xaa Thr Trp Ser Ser Asn Pro 165 170 175

His Ala Trp Asp Glu Cys Arg Ile Cys Pro Ala Gly Ile Cys Lys Asp 180 185 190

Pro Ser Gly Leu Gly Ala Glu Cys Pro Ser Gln Pro Pro Leu His Gly 245 250 255

Ile His Ile Ala Asp Asn Asn Pro Phe Asn Leu Leu Arg Ile Pro Gly 260 265 270

Ser Val Ser Arg Glu Ala Ser Gly Leu Gly Arg Arg Ala Leu Ser Thr 275 280 285

His Ser Pro Pro Val 290

<210> 1120 <211> 190 <212> PRT <213> Homo sapiens

<400> 1120

Ala Ala Ala Ala Gly Asp Pro Gly Ala Met Gly Arg Ala Arg Asp 1 5 10 15

Ala Ile Leu Asp Ala Leu Glu Asn Leu Thr Ala Glu Glu Leu Lys Lys \$20\$

Phe Lys Leu Lys Leu Leu Ser Val Pro Leu Arg Glu Gly Tyr Gly Arg

Ile Pro Arg Gly Ala Leu Leu Ser Met Asp Ala Leu Asp Leu Thr Asp 50 55 60

Lys Leu Val Ser Phe Tyr Leu Glu Thr Tyr Gly Ala Glu Leu Thr Ala 65 70 75 80

Asn Val Leu Arg Asp Met Gly Leu Gln Glu Met Ala Gly Gln Leu Gln 85 90 95

Ala Ala Thr His Gln Gly Ser Gly Ala Ala Pro Ala Gly Ile Gln Ala
100 105 110

Pro Pro Gln Ser Ala Ala Lys Pro Gly Leu His Phe Ile Asp Gln His

1124

115 120 125 Arg Ala Ala Leu Ile Ala Arg Val Thr Asn Val Glu Trp Leu Leu Asp 135 Ala Leu Tyr Gly Lys Val Leu Thr Asp Glu Gln Tyr Gln Ala Val Arg Pro Ser Pro Pro Thr Gln Ala Arg Cys Gly Ser Ser Ser Val Ser His 170 Gln Pro Gly Thr Gly Pro Ala Arg Thr Cys Ser Ser Arg Pro 185 <210> 1121 <211> 217 <212> PRT <213> Homo sapiens Gly Arg Lys Trp Phe Cys Pro Tyr Lys Thr Trp Arg Lys Ala Phe Leu 10 Ser Pro Arg Lys Arg His Val Met Ser Gln Ser Cys Gly Ala Arg Ala 25 Glu Val Gln Ala Thr Gly Ser Asp Gly Ala Pro Thr Lys Ala Leu Gly 40 Leu Val Arg Val Ala Ala Val Ser Ser Asp Ser Cys Val Val Pro Met Val Glu Lys Lys Thr Ser Val Arg Ser Gln Asp Pro Gly Gln Arg Arg 70 Val Leu Asp Arg Ala Ala Arg Gln Arg Arg Ile Asn Arg Gln Leu Glu 90 Ala Leu Glu Asn Asp Asn Phe Gln Asp Asp Pro His Ala Gly Leu Pro 105 Gln Leu Gly Lys Arg Leu Pro Gln Phe Asp Asp Asp Ala Asp Thr Gly Lys Lys Lys Lys Thr Arg Gly Asp His Phe Lys Leu Arg Phe Arg Lys Asn Phe Gln Ala Leu Leu Glu Glu Gln Asn Leu Ser Val Ala Glu 150 155

Gly Pro Asn Tyr Leu Thr Ala Cys Ala Gly Pro Pro Ser Arg Pro Gln
165 170 175

Arg Pro Phe Cys Ala Val Cys Gly Phe Pro Ser Pro Tyr Thr Cys Val

Ser Cys Gly Ala Arg Tyr Cys Thr Val Arg Cys Leu Gly Thr His Gln \$195\$ \$200\$ \$205\$

Glu Thr Arg Cys Leu Lys Trp Thr Val 210 215

<210> 1122

<211> 112

<212> PRT

<213> Homo sapiens

<400> 1122

Gly Asn Cys Gln Lys Cys Ala Phe Gly Tyr Ser Gly Leu Asp Cys Lys $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Asp Lys Phe Gln Leu Ile Leu Thr Ile Val Gly Thr Ile Ala Gly Ile $20 \hspace{1cm} 25 \hspace{1cm} 30$

Val Ile Leu Ser Met Ile Ile Ala Leu Ile Val Thr Ala Arg Ser Asn $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Asn Lys Thr Lys His Ile Glu Glu Asn Leu Ile Asp Glu Asp Phe $50 \hspace{1.5cm} 55 \hspace{1.5cm} 60 \hspace{1.5cm}$

Gln Asn Leu Lys Leu Arg Ser Thr Gly Phe Thr Asn Leu Gly Ala Glu 65 70 75 80

Gly Ser Val Phe Pro Lys Val Arg Ile Thr Ala Ser Arg Asp Ser Gln

Met Gln Asn Pro Tyr Ser Ser His Ser Ser Met Pro Arg Pro Asp Tyr 100 105 110

<210> 1123

<211> 216

<212> PRT

<213> Homo sapiens

<400> 1123 Gly Lys Leu Val Cys Gly Met Val Ser Tyr Leu Asn Asp Leu Pro Ser 10 Gln Arg Ile Gln Pro Gln Gln Val Ala Val Trp Pro Thr Met Val Asp Ile Asn Ser Pro Glu Ser Leu Thr Glu Ala Tyr Lys Leu Arg Ala Ala 40 Arg Leu Val Glu Ile Ala Ala Lys Asn Leu Gln Lys Glu Val Ile His Arg Lys Ser Lys Glu Val Ala Trp Asn Leu Thr Ser Val Asp Leu Val 70 Arg Ala Ser Glu Ala His Cys His Tyr Val Val Val Lys Leu Phe Ser 90 Glu Lys Leu Leu Lys Ile Gln Asp Lys Ala Ile Gln Ala Val Leu Arg Ser Leu Cys Leu Leu Tyr Ser Leu Tyr Gly Ile Ser Gln Asn Ala Gly 120 Asp Phe Leu Gln Gly Ser Ile Met Thr Glu Pro Gln Ile Thr Gln Val 135 Asn Gln Arg Val Lys Glu Leu Leu Thr Leu Ile Arg Ser Asp Ala Val 150 155 Ala Leu Val Asp Ala Phe Asp Phe Gln Asp Val Thr Leu Gly Ser Val 165 170 Leu Gly Arg Tyr Asp Gly Asn Val Tyr Glu Asn Leu Phe Glu Trp Ala 185 Lys Asn Ser Pro Leu Asn Lys Ala Glu Val His Glu Ser Tyr Lys His 200

<210> 1124 <211> 218

210

<212> PRT

<213> Homo sapiens

Leu Lys Ser Leu Gln Ser Lys Leu

<400)> 1:	124													
Pro 1	Ser	Pro	Arg	Pro 5	Pro	Asp	Pro	Glu	Ser 10	Ser	Gln	Leu	Arg	Pro 15	G13
Gly	Asp	Gly	Ala 20	Glu	Leu	Arg	Val	Leu 25	Val	Asp	Met	Asp	Gly 30	Val	Let
Ala	Asp	Phe 35	Glu	Ala	Gly	Leu	Leu 40	Arg	Gly	Phe	Arg	Arg 45	Arg	Phe	Pro
Glu	Glu 50	Pro	His	Val	Pro	Leu 55	Glu	Gln	Arg	Arg	Gly 60	Phe	Leu	Ala	Arg
Glu 65	Gln	туг	Arg	Ala	Leu 70	Arg	Pro	Asp	Leu	Ala 75	Asp	Lys	Val	Ala	Ser 80
Val	Tyr	Glu	Ala	Pro 85	Gly	Phe	Phe	Leu	Asp 90	Leu	Glu	Pro	Ile	Pro 95	Gly
Ala	Leu	Asp	Ala 100	Val	Arg	Glu	Met	Asn 105	Asp	Leu	Pro	Asp	Thr 110	Gln	Va]
Phe	Ile	Cys 115	Thr	Ser	Pro	Leu	Leu 120	Lys	Tyr	His	His	Cys 125	Val	Gly	Glu
Lys	туr 130	Arg	Trp	Val	Glu	Gln 135	His	Leu	Gly	Pro	Gln 140	Phe	Val	Glu	Arg
Ile 145	Ile	Leu	Thr	Arg	Asp 150	Lys	Thr	Val	Val	Leu 155	Gly	Asp	Leu	Leu	11e
Asp	Asp	Lys	Asp	Thr 165	Val	Arg	Gly	Gln	Glu 170	Glu	Thr	Pro	Ser	Trp 175	Glu
His	Ile	Leu	Phe 180	Thr	Cys	Cys	His	Asn 185	Arg	His	Leu	Val	Leu 190	Pro	Pro
Thr	Arg	Arg	Arg	Leu	Leu	Ser	Trp	Ser	Asp	Asn	Trp	Arg	Glu	Ile	Leu

<210> 1125 <211> 87

210

<212> PRT

<213> Homo sapiens

Asp Ser Lys Arg Gly Ala Ala Gln Arg Glu

215

<400> 1125

1128

Met Arg Arg Arg Val Phe Phe Leu His Arg Cys Ser Ile Leu Val Phe 1 5 10 Leu Phe Pro Cys Lys Cys Asn Gln Met Pro Phe Tyr Met Trp Thr Tyr 25 Leu Tyr Trp Pro Asn Ile Phe Phe Leu Leu Ser Leu Phe Phe Pro 35 40 Phe Phe Leu Leu Pro Leu Phe Leu Tyr Ser Phe Leu Phe Leu Phe Phe Phe Phe Phe Ser Phe Phe Phe Gly Ser Cys Cys Tyr Pro Arg His Phe 70 75 Thr Ser Pro Ser Leu Lys Gly 85 <210> 1126 <211> 174 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (7) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (173) <223> Xaa equals any of the naturally occurring L-amino acids Pro Pro Leu Gly Lys Lys Xaa Glu Leu His Arg Gly Gly Gly Arg Ser Arg Leu Glu Glu Phe Gln Met Arg Ala Arg Pro Arg Pro Arg Pro Leu 25 Trp Ala Thr Val Leu Ala Leu Gly Ala Leu Ala Gly Val Gly Val Gly 40 Gly Pro Asn Ile Cys Thr Thr Arg Gly Val Ser Ser Cys Gln Gln Cys 55 Leu Ala Val Ser Pro Met Cys Ala Trp Cys Ser Asp Glu Ala Leu Pro

1129

Leu Gly Ser Pro Arg Cys Asp Leu Lys Glu Asn Leu Leu Lys Asp Asn 85 90 95

Cys Ala Pro Glu Ser Ile Glu Phe Pro Val Ser Glu Ala Arg Val Leu 100 105 110

Glu Asp Arg Pro Leu Ser Asp Lys Gly Ser Gly Asp Ser Ser Gln Val 115 120 125

Thr Gln Val Ser Pro Gln Arg Ile Ala Leu Arg Leu Arg Pro Asp Asp 130 135 140

Ser Lys Asn Phe Ser Ile Gln Val Arg Gln Val Glu Asp Tyr Pro Val 145 150 150 165

Asp Ile Tyr Tyr Leu Met Asp Leu Ser Tyr Ser Met Xaa Gly 165 170

<210> 1127

<211> 359

<212> PRT

<213> Homo sapiens

<400> 1127

Pro Gln Pro Phe Gln Gly Ser Gly Cys Val Ile Ala Ile Leu Gly Lys
1 5 10 15

Arg Cys Ser Arg Pro Trp Arg Thr Trp Arg Gly Arg Thr Pro Ser Thr 20 25 30

Arg His Ile Cys Ser Trp Cys Thr Met Val Ser Gly Thr Ser Ala Ala 35 40 45

Val Glu Glu Tyr Ser Cys Glu Phe Gly Ser Ala Lys Tyr Tyr Ala Leu 50 55 60

Cys Gly Phe Gly Gly Val Leu Ser Cys Gly Leu Thr His Thr Ala Val 65 70 75 80

Val Pro Leu Asp Leu Val Lys Cys Arg Met Gln Val Asp Pro Gln Lys 85 90 95

Tyr Lys Gly Ile Phe Asn Gly Phe Ser Val Thr Leu Lys Glu Asp Gly 100 105 110

Val Arg Gly Leu Ala Lys Gly Trp Ala Pro Thr Phe Leu Gly Tyr Ser 115 120 125

Met Gln Gly Leu Cys Lys Phe Gly Phe Tyr Glu Val Phe Lys Val Leu

		130					135					140				
	yr 45	Ser	Asn	Met	Leu	Gly 150	Glu	Glu	Asn	Thr	Tyr 155	Leu	Trp	Arg	Thr	Se:
Le	eu	Tyr	Leu	Ala	Ala 165		Ala	Ser	Ala	Glu 170	Phe	Phe	Ala	Asp	Ile 175	Alá
Le	eu	Ala	Pro	Met 180		Ala	Ala	Lys	Val 185	Arg	Ile	Gln	Thr	Gln 190	Pro	Gly
T	yr	Ala	Asn 195		Leu	Arg	Asp	Ala 200	Ala	Pro	Lys	Met	Туг 205	Lys	Glu	G1
G]	Ly	Leu 210	Lys	Ala	Phe	Tyr	Lys 215	Gly	Val	Ala	Pro	Leu 220	Trp	Met	Arg	Glr
13 22		Pro	Tyr	Thr	Met	Met 230	Lys	Phe	Ala	Cys	Phe 235	Glu	Arg	Thr	Val	G1: 240
A	La	Leu	Tyr	Lys	Phe 245	Val	Val	Pro	Lys	Pro 250	Arg	Ser	Glu	Cys	Ser 255	Lys
Pı	0	Glu	Gln	Leu 260	Val	Val	Thr	Phe	Val 265	Ala	Gly	Tyr	Ile	Ala 270	Gly	Val
Pł	ne	Суѕ	Ala 275	Ile	Val	Ser	His	Pro 280	Ala	Asp	Ser	Val	Val 285	Ser	Val	Leu
As	sn	Lys 290	Glu	Lys	Gly	Ser	Ser 295	Ala	Ser	Leu	Val	Leu 300	Lys	Arg	Leu	Gly
₽ħ 30		Lys	Gly	Val	Trp	Lys 310	Gly	Leu	Phe	Ala	Arg 315	Ile	Ile	Met	Ile	Gly 320
Th	r	Leu	Thr	Ala	Leu 325	Gln	Trp	Phe	Ile	Tyr 330	Asp	Ser	Val	Lys	Val 335	Tyr
Ph	e	Arg	Leu	Pro 340	Arg	Pro	Pro	Pro	Pro 345	Glu	Met	Pro	Glu	Ser 350	Leu	Lys
Lу	s	Lys	Leu	Gly	Leu	Thr	Gln									

<210> 1128

<211> 399

<212> PRT

<213> Homo sapiens

<220> <221> SITE <222> (208) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (349) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1128 Leu Glu Pro Pro Ala Glu Pro Leu Gln Tyr Leu Ala Cys Tyr Arg Phe His Cys Ser His Gln Leu Gly Asp Asn Met Trp Phe Leu Thr Thr Leu Leu Leu Trp Val Pro Val Asp Gly Gln Val Asp Thr Thr Lys Ala Val Ile Thr Leu Gln Pro Pro Trp Val Ser Val Phe Gln Glu Glu Thr Val 55 Thr Leu His Cys Glu Val Leu His Leu Pro Gly Ser Ser Ser Thr Gln 70 75 Trp Phe Leu Asn Gly Thr Ala Thr Gln Thr Ser Thr Pro Ser Tyr Arg 85 90 Ile Thr Ser Ala Ser Val Asn Asp Ser Gly Glu Tyr Arg Cys Gln Arg 105 Gly Leu Ser Gly Arg Ser Asp Pro Ile Gln Leu Glu Ile His Arg Gly Trp Leu Leu Gln Val Ser Ser Arg Val Phe Thr Glu Gly Glu Pro 135 Leu Ala Leu Arg Cys His Ala Trp Lys Asp Lys Leu Val Tyr Asn Val Leu Tyr Tyr Arg Asn Gly Lys Ala Phe Lys Phe Phe His Trp Asn Ser 170 Asn Leu Thr Ile Leu Lys Thr Asn Ile Ser His Asn Gly Thr Tyr His Cys Ser Gly Met Gly Lys His Arg Tyr Thr Ser Ala Gly Ile Ser Xaa 195 200 205

Thr Val Lys Glu Leu Phe Pro Ala Pro Val Leu Asn Ala Ser Val Thr

210 215 220 Ser Pro Leu Leu Glu Gly Asn Leu Val Thr Leu Ser Cys Glu Thr Lys Leu Leu Leu Gln Arg Pro Gly Leu Gln Leu Tyr Phe Ser Phe Tyr Met 250 Gly Ser Lys Thr Leu Arg Gly Arg Asn Thr Ser Ser Glu Tyr Gln Ile 265 Leu Thr Ala Arg Arg Glu Asp Ser Gly Leu Tyr Trp Cys Glu Ala Ala 280 Thr Glu Asp Gly Asn Val Leu Lys Arg Ser Pro Glu Leu Glu Leu Gln 295 Val Leu Gly Leu Gln Leu Pro Thr Pro Val Trp Phe His Val Leu Phe 310 315 Tyr Leu Ala Val Gly Ile Met Phe Leu Val Asn Thr Val Leu Trp Val 325 330 Thr Ile Arg Lys Glu Leu Lys Arg Lys Lys Trp Xaa Leu Glu Ile 345 Ser Leu Asp Ser Gly His Glu Lys Lys Val Ile Ser Ser Leu Gln Glu Asp Arg His Leu Glu Glu Glu Leu Lys Cys Gln Glu Gln Lys Glu Glu 375 Gln Leu Gln Glu Gly Val His Arg Lys Glu Pro Gln Gly Ala Thr 385 <210> 1129 <211> 147 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (7) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (8)

<223> Xaa equals any of the naturally occurring L-amino acids

PCT/US00/05882 WO 00/55350

1133

Glu Ile Leu Phe Ile Phe Xaa Xaa Phe Phe Lys Gly Leu Ser Asn Ser Ala Ala Ala Met Ala Pro Val Lys Lys Leu Val Val Lys Gly Gly Lys Lys Lys Lys Gln Val Leu Lys Phe Thr Leu Asp Cys Thr His Pro Val Glu Asp Gly Ile Met Asp Ala Ala Asn Phe Glu Gln Phe Leu Gln Glu Arg Ile Lys Val Asn Gly Lys Ala Gly Asn Leu Gly Gly Val Val Thr Ile Glu Arg Ser Lys Ser Lys Ile Thr Val Thr Ser Glu Val Pro

85 90

Phe Ser Lys Arg Tyr Leu Lys Tyr Leu Thr Lys Lys Tyr Leu Lys Lys 100 105

Asn Asn Leu Arg Asp Trp Leu Arg Val Val Ala Asn Ser Lys Glu Ser 120

Tyr Glu Leu Arg Tyr Phe Gln Ile Asn Gln Asp Glu Glu Glu Glu

Asp Glu Asp 145 '

<210> 1130 <211> 91 <212> PRT <213> Homo sapiens

Asn Cys Ser Pro Ala Phe Tyr Gly Ser Ser Leu Pro Cys Pro Gln Thr

Gln Gln Lys Arg Arg Gly Arg Ile Arg Gly Leu Ser Arg Pro Ala Pro

Leu Pro Thr Cys His Thr Arg Cys Glu Phe Glu His Ser Pro Glu Met 40

Glu Thr Ser His Pro Gln Leu Asn Asn Gly Pro Phe Met Pro Thr Leu 55

1134

Pro Thr Arg Arg Gly Gln Arg Cys Thr Arg Arg Pro Ser Ser Pro 65 70 75 80

Ser Ser Ala Pro Ser His Tyr Ser Trp Phe Tyr 85 90

<210> 1131

<211> 510

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (228)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (352)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1131

Thr Ser Glu Glu Ser Arg Pro Arg Leu Ser Gln Leu Ser Val Thr Asp
1 5 10 15

Val Thr Thr Ser Ser Leu Arg Leu Asn Trp Glu Ala Pro Pro Gly Ala 20 25 30

Phe Asp Ser Phe Leu Leu Arg Phe Gly Val Pro Ser Pro Ser Thr Leu 35 40 45

Glu Pro His Pro Arg Pro Leu Leu Gln Arg Glu Leu Met Val Pro Gly 50 55 60

Thr Arg His Ser Ala Val Leu Arg Asp Leu Arg Ser Gly Thr Leu Tyr 65 70 75 80

Ser Leu Thr Leu Tyr Gly Leu Arg Gly Pro His Lys Ala Asp Ser Ile 85 90 95

Gln Gly Thr Ala Arg Thr Leu Ser Pro Val Leu Glu Ser Pro Arg Asp
100 105 110

Leu Gln Phe Ser Glu Ile Arg Glu Thr Ser Ala Lys Val Asn Trp Met 115 120 125

Pro Pro Pro Ser Arg Ala Asp Ser Phe Lys Val Ser Tyr Gln Leu Ala 130 135 140.

145		, GTZ	, GT	1 PIC	150		. vai	. GI	ı va.	155		, GII	1 ATS	Arg	160
Glr	l Lys	. Lei	ı Glı	165		ıIle	Pro	Gly	7 Ala 170	_	ј Туг	Glu	ı Val	Thr 175	
Val	. Ser	Val	180	_	Phe	: Glu	Glu	Ser 185		ı Pro	Leu	Thr	Gly 190		Leu
Thr	Thr	Val 195		Asp	Gly	Pro	200		Let	ı Arg	, Ala	Leu 205		Leu	Thr
Glu	Gly 210		e Ala	Val	Leu	His 215	Trp	Lys	Pro	Pro	Gln 220		Pro	Val	Asp
Thr 225	_	Asp) Xaa	Gln	Val 230		Ala	Pro	Gly	235		Pro	Leu	Gln	Ala 240
Glu	Thr	Pro	Gly	Ser 245		Val	Asp	туr	Pro 250		His	Asp	Leu	Val 255	
His	Thr	Asn	Tyr 260		Ala	Thr	Val	Arg 265		Leu	Arg	Gly	Pro 270		Leu
Thr	Ser	Pro 275		Ser	Ile	Thr	Phe 280	Thr	Thr	Gly	Leu	Glu 285		Pro	Arg
Asp	Leu 290		Ala	Lys	Glu	Val 295	Thr	Pro	Arg	Thr	Ala 300	Leu	Leu	Thr	Trp
Thr 305		Pro	Pro	Val	Arg 310	Pro	Ala	Gly	Tyr	Leu 315		Ser	Phe	His	Thr 320
Pro	Gly	Gly	Gln	Thr 325	Gln	Glu	Ile	Leu	Leu 330		Gly	Gly	Ile	Thr 335	Ser
His	Gln	Leu	Leu 340	Gly	Leu	Phe	Pro	Ser 345	Thr	Ser	Tyr	Asn	Ala 350	Arg	Xaa
Gln	Ala	Met 355	Trp	Gly	Gln	Ser	Leu 360	Leu	Pro	Pro	Val	ser 365	Thr	Ser	Phe
Thr	Thr 370	Gly	Gly	Leu	Arg	Ile 375	Pro	Phe	Pro	Arg	Asp 380	Cys	Gly	Glu	Glu
Met 385	Gln	Asn	Gly	Ala	Gly 390	Ala	Ser	Arg	Thr	Ser 395	Thr	Ile	Phe	Leu	Asn 400
Gly	Asn	Arg	Glu	-			Asn			-			Glu	Thr 415	Asp

Gly Gly Gly Trp Leu Val Phe Gln Arg Arg Met Asp Gly Gln Thr Asp 425 Phe Trp Arg Asp Trp Glu Asp Tyr Ala His Gly Phe Gly Asn Ile Ser 435 440 Gly Glu Phe Trp Leu Gly Asn Glu Ala Leu His Ser Leu Thr Gln Ala Gly Asp Tyr Ser Met Arg Val Asp Leu Arg Ala Gly Asp Glu Ala Val 465 470 475 Phe Ala Gln Tyr Asp Ser Phe His Val Asp Ser Ala Ala Glu Tyr Tyr 490 Arg Leu His Leu Glu Gly Tyr His Gly Thr Ala Gly Thr Pro 500 505 <210> 1132 <211> 430 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (182) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (216) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (408) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (410) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (414) <223> Xaa equals any of the naturally occurring L-amino acids

i. .

1137

<220> <221> SITE <222> (420) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (428) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1132 Arg Thr Ala Asp Gln Thr Val Thr Ala Ala Leu Thr Lys Arg Ser Trp Asn Ser Ser Ser Pro Gln Arg Arg Thr Glu Gln Thr Ala Glu Thr 25 Met Glu Ser Pro Ser Ala Pro Pro His Arg Trp Cys Ile Pro Trp Gln 40 Arg Leu Leu Thr Ala Ser Leu Leu Thr Phe Trp Asn Pro Pro Thr 55 Thr Ala Lys Leu Thr Ile Glu Ser Thr Pro Phe Asn Val Ala Glu Gly 70 75 Lys Glu Val Leu Leu Val His Asn Leu Pro Gln His Leu Phe Gly Tyr Ser Trp Tyr Lys Gly Glu Arg Val Asp Gly Asn Arg Gln Ile Ile 105 Gly Tyr Val Ile Gly Thr Gln Gln Ala Thr Pro Gly Pro Ala Tyr Ser Gly Arg Glu Ile Ile Tyr Pro Asn Ala Ser Leu Leu Ile Gln Asn Ile Ile Gln Asn Asp Thr Gly Phe Tyr Thr Leu His Val Ile Lys Ser Asp Leu Val Asn Glu Glu Ala Thr Gly Gln Phe Arg Val Tyr Pro Glu Leu 170 Pro Lys Pro Ser Ile Xaa Ser Asn Asn Ser Lys Pro Val Glu Asp Lys 185 Asp Ala Val Ala Phe Thr Cys Glu Pro Glu Thr Gln Asp Ala Thr Tyr 195 200 205

Leu Trp Trp Val Asn Asn Gln Xaa Leu Pro Val Ser Pro Arg Leu Gln

215 220 210 Leu Ser Asn Gly Asn Arg Thr Leu Thr Leu Phe Asn Val Thr Arg Asn Asp Thr Ala Ser Tyr Lys Cys Glu Thr Gln Asn Pro Val Ser Ala Arg 250 Arg Ser Asp Ser Val Ile Leu Asn Val Leu Tyr Gly Pro Asp Ala Pro 265 Thr Ile Ser Pro Leu Asn Thr Ser Tyr Arg Ser Gly Glu Asn Leu Asn 280 Leu Ser Cys His Ala Ala Ser Asn Pro Pro Ala Gln Tyr Ser Trp Phe 295 Val Asn Gly Thr Phe Gln Gln Ser Thr Gln Glu Leu Phe Ile Pro Asn 310 315 Ile Thr Val Asn Asn Ser Gly Ser Tyr Thr Cys Gln Ala His Asn Ser 325 330 Asp Thr Gly Leu Asn Arg Thr Thr Val Thr Thr Ile Thr Val Tyr Ala 345 Glu Pro Pro Lys Pro Phe Ile Thr Ser Asn Asn Ser Asn Pro Val Glu 360 Asp Glu Asp Ala Val Ala Leu Thr Cys Glu Pro Glu Ile Gln Asn Thr Thr Tyr Leu Trp Trp Val Asn Asn Gln Ser Leu Pro Val Ser Pro Arg 395 Leu His Leu Pro Met Thr Thr Xaa Pro Xaa Leu Tyr Ser Xaa Ala Gln Gly Met Met Xaa Asp Pro Met Asn Val Glu Ser Xaa Thr Asn 425

<210> 1133 <211> 737 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (1)

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<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<220>
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<220>
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<222> (534)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (535)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1133
Xaa His Ala Ser Ala Ala Xaa Pro Thr Val Thr Ala Ala Leu Thr Arg
Ala Phe Leu Glu Leu Lys Leu Ser Thr Lys Arg Trp Thr Glu Lys Thr
                                 25
Ala Glu Thr Met Gly Pro Pro Ser Ala Pro Pro Cys Arg Leu His Val
                             40
Pro Trp Lys Glu Val Leu Leu Thr Ala Ser Leu Leu Thr Phe Trp Asn
                                             60
     50
                         55
Pro Pro Thr Thr Ala Lys Leu Thr Ile Glu Ser Thr Pro Phe Asn Val
```

65					70					75					80
Ala	Glu	Gly	Lys	Glu 85		Leu	Leu	Leu	Ala 90	His	Asn	Leu	Pro	Gln 95	Asn
Arg	Ile	Gly	туг 100		Trp	Tyr	Lys	Gly 105	Glu	Arg	Val	Asp	Gly 110	Asn	Ser
Leu	Ile	Val 115	Gly	Tyr	Val	Ile	Gly 120		Gln	Gln	Ala	Thr 125	Pro	Gly	Pro
Ala	Туг 130	Ser	Gly	Arg	Glu	Thr 135	Ile	Tyr	Pro	Asn	Xaa 140	Ser	Leu	Leu	Ile
Gln 145	Asn	Val	Thr	Gln	Asn 150	Asp	Thr	Gly	Phe	Туг 155	Thr	Leu	Gln	Val	11e 160
Lys	Ser	Asp	Leu	Val 165	Asn	Glu	Glu	Ala	Thr 170	Gly	Gln	Phe	His	Val 175	Tyr
Pro	Glu	Leu	Pro 180	Lys	Pro	Ser	Ile	Ser 185	Xaa	Asn	Asn	Ser	Asn 190	Pro	Val
Glu	Xaa	Lys 195	Asp	Ala	Val	Ala	Phe 200	Thr	Cys	Glu	Pro	Glu 205	Val	Gln	Asn
Thr	Thr 210	Tyr	Leu	Trp	Trp	Val 215	Asn	Gly	Gln	Ser	Leu 220	Pro	Val	Ser	Pro
Arg 225	Leu	Gln	Leu	Ser	Asn 230	Gly	Asn	Met	Thr	Leu 235	Thr	Leu	Leu	Ser	Val 240
Lys	Arg	Asn	Asp	Ala 245	Gly	Ser	Tyr	Glu	Cys 250	Glu	Ile	Gln	Asn	Pro 255	Ala
Ser	Ala	Asn	Arg 260	Ser	Asp	Pro	Val	Thr 265	Leu	Asn	Val	Leu	Tyr 270	Gly	Pro
Asp	Gly	Pro 275	Thr	Ile	Ser	Pro	Ser 280	Lys	Ala	Asn	Tyr	Arg 285	Pro	Gly	Glu
Asn	Leu 290	Asn	Leu	Ser	Cys	His 295	Ala	Ala	Ser	Asn	Pro 300	Pro	Ala	Gln	Tyr
Ser 305	Trp	Phe	Xaa	Asn	Gly 310	Thr	Phe	Gln	Gln	Ser 315	Thr	Gln	Glu	Leu	Phe 320
[le	Pro	Asn	Ile	Thr 325	Val	Asn	Asn	Ser	Gly 330	Ser	Tyr	Thr	Cys	Gln 335	Ala
lis	Asn	Ser	Asp	Thr	Gly	Leu	Asn	Arg	Thr	Thr	Val	Thr	Thr	Ile	Thr

			340)				345	5				350)	
Va]	Туг	355		Pro	Pro	Lys	360		: Ile	Thr	Ser	365		Ser	Asr
Pro	7 Val		ı Asp	Glu	. Asp	375		Ala	Leu	Thr	380		Pro	Glu	Ile
Gln 385		Thr	Thr	Tyr	1eu 390	_	Trp	Val	. Asn	Asn 395		Ser	Leu	Pro	Val 400
Ser	Pro	Arg	Leu	Gln 405	Leu	Ser	Asn	Asp	410		Thr	Leu	Thr	Leu 415	
Ser	Val	Thr	Arg 420		qaA .	Val	Gly	Pro 425	_	G1u	Cys	Gly	11e		Asn
Glu	Leu	Ser 435		Asp	His	Ser	Asp 440		Val	Ile	Leu	Asn 445		Leu	Tyr
Gly	Pro 450	_	Asp	Pro	Thr	11e 455		Pro	Ser	Tyr	Thr 460		Tyr	Arg	Pro
Gly 465		Asn	Leu	Ser	Leu 470		Сув	His	Ala	Ala 475		Asn	Pro	Pro	Ala 480
Gln	Tyr	Ser	Trp	Leu 485	Ile	Asp	Gly	Asn	11e 490	Gln	Gln	His	Thr	Gln 495	Glu
Leu	Phe	Ile	Ser 500	Asn	Ile	Thr	Glu	Lys 505	Asn	Ser	Gly	Leu	Туг 510	Thr	Cys
Gln	Ala	Asn 515	Asn	Ser	Ala	Ser	Gly 520	His	Ser	Arg	Thr	Thr 525	Val	Lys	Thr
Ile	Thr 530	Val	Ser	Ala	Xaa	Xaa 535	Pro	Lys	Pro	Ser	Ile 540	Ser	Ser	Asn	Asn
Ser 545	Lys	Pro	Val	Glu	Asp 550	Lys	Asp	Ala	Val	Ala 555	Phe	Thr	Суз	Glu	Pro 560
Glu	Ala	Gln	Asn	Thr 565	Thr	Tyr	Leu	Trp	Trp 570	Val	Asn	Gly	Gln	ser 575	Leu
Pro	Val	Ser	Pro 580	Arg	Leu	Gln	Leu	Ser 585	Asn	Gly	Asn	Arg	Thr 590	Leu	Thr
Leu	Phe	Asn 595	Val	Thr	Arg	Asn	Asp 600	Ala	Arg	Ala	Tyr	Val 605	Суз	Gly	Ile
Gln	Asn	Ser	Val	Ser	Ala	Asn	Arg	Ser	Asp	Pro	Val	Thr	Leu	Asp	Val

1142

· 615 610 620 Leu Tyr Gly Pro Asp Thr Pro Ile Ile Ser Pro Pro Asp Ser Ser Tyr 630 635 Leu Ser Gly Ala Asn Leu Asn Leu Ser Cys His Ser Ala Ser Asn Pro 650 Ser Pro Gln Tyr Ser Trp Arg Ile Asn Gly Ile Pro Gln Gln His Thr Gln Val Leu Phe Ile Ala Lys Ile Thr Pro Asn Asn Asn Gly Thr Tyr 680 Ala Cys Phe Val Ser Asn Leu Ala Thr Gly Arg Asn Asn Ser Ile Val 695 Lys Ser Ile Thr Val Ser Ala Ser Gly Thr Ser Pro Gly Leu Ser Ala 710 Gly Ala Thr Val Gly Ile Met Ile Gly Val Leu Val Gly Val Ala Leu 730 Ile

<210> 1134

<211> 71

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (4)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1134

Phe Gly Thr Xaa Arg Ser Val Val Leu Leu Leu Val Ala Val Arg Leu $1 \ 5 \ 10 \ 15$

His Thr Leu Leu Ser Cys Pro Leu Glu Gln Pro Ala Gly Thr Glu Trp

Ile Leu Glu Glu Gly Val Thr Thr Gly Pro Pro Arg Lys Pro Arg Ala 35 40 45

Asp Ile Tyr Asn Leu Arg Ser Pro Asp Glu Phe Ile Val Gly Gln Asn 50 55 60

Gln Ala Leu Ile Glu Pro Gly 65 70

<210> 1135

<211> 244

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (101)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1135

Gly Leu Arg Arg Leu Asp Ser Ala Ser Gly Thr Val Tyr Thr Ala Met
1 5 10 15

Asp Val Ala Thr Gly Gln Glu Val Ala Ile Lys Gln Met Asn Leu Gln $20 \ \ 25 \ \ 30$

Gln Gln Pro Lys Lys Glu Leu Ile Ile Asn Glu Ile Leu Val Met Arg 35 40 45

Glu Asn Lys Asn Pro Asn Ile Val Asn Tyr Leu Asp Ser Tyr Leu Val
50 55 60

Gly Asp Glu Leu Trp Val Val Met Glu Tyr Leu Ala Gly Gly Ser Leu 65 70 75 80

Thr Asp Val Val Thr Glu Thr Cys Met Asp Glu Gly Gln Ile Ala Ala 85 90 95

Val Cys Arg Glu Xaa Leu Gln Ala Leu Glu Phe Leu His Ser Asn Gln
100 105 110

Ile Thr Pro Glu Gln Ser Lys Arg Ser Thr Met Val Gly Thr Pro Tyr 115 120 125

Trp Met Ala Pro Glu Val Val Thr Arg Lys Ala Tyr Gly Pro Lys Val

Asp Ile Trp Ser Leu Gly Ile Met Ala Ile Glu Met Ile Glu Gly Glu 145 150 155 160

Pro Pro Tyr Leu Asn Glu Asn Pro Leu Arg Ala Leu Tyr Leu Ile Ala

Thr Asn Gly Thr Pro Glu Leu Gln Asn Pro Glu Lys Leu Ser Ala Ile 180 185 190

Phe Arg Asp Phe Leu Asn Arg Cys Leu Glu Met Asp Val Glu Lys Arg 200 Gly Ser Ala Lys Glu Leu Leu Gln His Gln Phe Leu Lys Ile Ala Lys 215 Pro Leu Ser Ser Leu Thr Pro Leu Ile Ala Ala Lys Glu Ala Thr 235 Lys Asn Asn His <210> 1136 <211> 166 <212> PRT <213> Homo sapiens <400> 1136 Arg Ala Glu Phe Gly Thr Ser Pro Arg Ala Arg Arg His Glu Cys Cys 10 Arg Phe Leu Asp Asp Asn Gln Ile Ile Thr Ser Ser Gly Asp Thr Thr 20 25 Cys Ala Leu Trp Asp Ile Glu Thr Gly Gln Gln Thr Val Gly Phe Ala 40 Gly His Ser Gly Asp Val Met Ser Leu Ser Leu Ala Pro Asp Gly Arg Thr Phe Val Ser Gly Ala Cys Asp Ala Ser Ile Lys Leu Trp Asp Val 75 Arg Asp Ser Met Cys Arg Gln Thr Phe Ile Gly His Glu Ser Asp Ile Asn Ala Val Ala Phe Phe Pro Asn Gly Tyr Ala Phe Thr Thr Gly Ser 105 Asp Asp Ala Thr Cys Arg Leu Phe Asp Leu Arg Ala Asp Gln Glu Leu Leu Met Tyr Ser His Asp Asn Ile Ile Cys Gly Ile Thr Ser Val Ala Phe Ser Arg Ser Asp Gly Cys Cys Ser Leu Ala Thr Thr Thr Ser Thr 145 150 155

1145

Ala Thr Ser Gly Met Pro 165

<210> 1137

<211> 79

<212> PRT

<213> Homo sapiens

<400> 1137

Thr Asn Asn Lys Ser Leu Val Gln Leu Lys His Ile Ser Asn Asp Phe 1 5 10 15

Ser Lys Phe Lys Val Asp His Asp Arg Ile Ile Lys Asp Arg Lys Asp 20 25 30

Leu Ser Asn Leu Val Met Thr Ile Ile Ser Ile Phe Ala Glu Leu Lys 35 40 45

Ile Phe Asn Phe Ile Asn Met Leu Leu Gln Leu Pro Asp Leu Lys Lys 50 55 60

Lys Ser Phe Pro His Ser Gln Leu Lys Val Arg Thr Leu His Phe 65 70 75

<210> 1138

<211> 397

<212> PRT

<213> Homo sapiens

<400> 1138

Pro Thr Arg Pro Ser Ser Val Ser Arg Arg Asp Lys Ser Lys Gln Val

Trp Glu Ala Val Leu Leu Pro Leu Ser Leu Leu Ser Met Met Asp Leu 20 25 30

Arg Asn Thr Pro Ala Lys Ser Leu Asp Lys Phe Ile Glu Asp Tyr Leu $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Leu Pro Asp Thr Cys Phe Arg Met Gln Ile Asn His Ala Ile Asp Ile 50 55 60

Ile Cys Gly Phe Leu Lys Glu Arg Cys Phe Arg Gly Ser Ser Tyr Pro 65 70 75 80

Val Cys Val Ser Lys Val Val Lys Gly Gly Ser Ser Gly Lys Gly Thr 85 90 95

Thr	Leu	Arg	Gly 100		Ser	Asp	Ala	105		Val	Val	. Phe	Leu 110		Pro
Leu	Thr	Thr 115		: Gln	. Asp	Gln	Leu 120		Arg	Arg	Gly	Glu 125		Ile	Gln
Glu	11e	_	Arg	Gln	Leu	Glu 135		Cys	Gln	Arg	Glu 140		, Ala	Phe	Ser
Val 145	_	Phe	Glu	Val	Gln 150	Ala	Pro	Arg	Trp	Gly 155		Pro	Arg	Ala	Leu 160
Ser	Phe	Val	Leu	Ser 165	Ser	Leu	Gln	Leu	Gly 170		Gly	Val	Glu	Phe 175	-
Va1	Leu	Pro	Ala 180		Asp	Ala	Leu	Asp 185	Phe	Ala	Arg	Thr	Gly 190	Gln	Leu
Thr	Gly	Gly 195	_	Lys	Pro	Asn	Pro 200		Ile	Tyr	Val	Lys 205		Ile	Glu
Glu	Cys 210		Asp	Leu	G1n	Lys 215	Glu	Gly	Glu	Phe	Ser 220		Cys	Phe	Thr
Glu 225	Leu	Gln	Arg	Asp	Phe 230	Leu	Lys	Gln	Arg	Pro 235	Thr	Lys	Leu	Lys	Ser 240
Leu	Ile	Arg	Leu	Val 245	Lys	His	Trp	Tyr	Gln 250		Cys	Lys	Lys	Lys 255	
3ly	Lys	Leu	Pro 260	Pro	Gln	Tyr	Ala	Leu 265	Glu	Leu	Leu	Thr	Val 270	Tyr	Ala
Crp	Glu	Arg 275	Gly	Ser	Met	Lys	Thr 280	His	Phe	Asn	Thr	Ala 285	Gln	Gly	Phe
Arg	Thr 290	Val	Leu	Glu	Leu	Val 295	Ile	Asn	Tyr	Gln	Gln 300	Leu	Cys	Ile	Tyr
rp 805	Thr	Lys	Tyr	Tyr	Asp 310	Phe	Lys	Asn	Pro	11e 315	Ile	Glu	Lys	Tyr	Leu 320
rg	Arg	Gln	Leu	Thr 325	Lys	Pro	Arg	Pro	Val 330	Ile	Leu	Asp	Pro	Ala 335	Asp
ro	Thr	Gly	Asn 340	Leu	Gly	Gly	Gly	Asp 345	Pro	Lys	Gly	Trp	Arg 350	Gln	Leu
la	Gln	Glu 355	Ala	Glu	Ala	Trp	Leu 360	Asn	Tyr	Pro	Cys	Phe 365	Lys	Asn	Trp

Asp Gly Ser Pro Val Ser Ser Trp Ile Leu Leu Val Arg Pro Pro Ala 370 375 380

Ser Ser Leu Pro Phe Ile Pro Ala Pro Leu His Glu Ala 385 390 395

<210> 1139

<211> 180

<212> PRT

<213> Homo sapiens

<400> 1139

Phe Leu Leu Ser Asn Ala Arg Trp Ser Asn Arg Pro Asp Thr Ala Thr

1 5 10 15

Ala Leu Ala Gly Gly Ala Val Met Pro Glu Leu Ile Leu Ser Pro Ala $20 \hspace{1cm} 25 \hspace{1cm} 30$

Thr Ala Pro His Pro Leu Lys Met Phe Ala Cys Ser Lys Phe Val Ser 35 40 45

Thr Pro Ser Leu Val Lys Ser Thr Ser Gln Leu Leu Ser Arg Pro Leu 50 55 60

Ser Ala Val Val Leu Lys Arg Pro Glu Ile Leu Thr Asp Glu Ser Leu 65 70 75 80

Ser Ser Leu Ala Val Ser Cys Pro Leu Thr Ser Leu Val Ser Ser Arg 85 90 95

Ser Phe Gln Thr Ser Ala Ile Ser Arg Asp Ile Asp Thr Ala Ala Lys

Phe Ile Gly Ala Gly Ala Ala Thr Val Gly Val Ala Gly Ser Gly Ala 115 120 125

Gly Ile Gly Thr Val Phe Gly Ser Leu Ile Ile Gly Tyr Ala Arg Asn 130 135 140

Pro Ser Leu Lys Gln Gln Leu Phe Ser Tyr Ala Ile Leu Gly Phe Ala 145 150 155 160

Leu Ser Glu Ala Met Gly Leu Phe Cys Leu Met Val Ala Phe Leu Ile 165 170 175

Leu Phe Ala Met

<21	.0> 1 .1> 4 .2> P	84													
<21	3> E	ото	sapi	ens.											
<22	1> s 2> (25)	qual	s an	y of	the	nat	ural	.ly o	ccur	ring	L-a	minc	aci	ds
	0> 1					_									
Trp 1		Leu	Arg	Ser 5		Gly	Lys	Leu	Thr 10		. Arg	Glu	Arg	11e	
Leu	Leu	Leu	Asp 20		Gly	Ser	Phe	Xaa 25		Ser	Asp	Met	Phe 30		Glu
His	Arg	Cys 35		Asp	Phe	Gly	Met 40		Ala	Asp	Lys	Asn 45		Phe	Pro
Gly	Asp 50		Val	Val	Thr	Gly 55	Arg	Gly	Arg	Ile	Asn 60		Arg	Leu	Va]
Tyr 65	Val	Phe	Ser	Gln	Asp 70	Phe	Thr	Val	Phe	Gly 75	Gly	Ser	Leu	Ser	Gly 80
Ala	His	Ala	Gln	Lys 85	Ile	Cys	Lys	Ile	Met 90	_	Gln	Ala	Ile	Thr 95	
Gly	Ala	Pro	Val 100	Ile	Gly	Leu	Asn	Asp 105		Gly	Gly	Ala	Arg 110	Ile	Gln
Glu	Gly	Val 115	Glu	Ser	Leu	Ala	Gly 120	Tyr	Ala	Asp	Ile	Phe 125	Leu	Arg	Asn
Val	Thr 130	Ala	Ser	Gly	Val	Ile 135	Pro	Gln	Ile	Ser	Leu 140	Ile	Met	Gly	Pro
Cys 145	Ala	Gly	Gly	Ala	Val 150	Tyr	Ser	Pro	Ala	Leu 155	Thr	Asp	Phe	Thr	Phe 160
Met	Val	Lys	Asp	Thr 165	Ser	Tyr	Leu	Phe	Ile 170	Thr	Gly	Pro	Asp	Val 175	Val
Lys	Ser	Val	Thr 180	Asn	Glu	Asp	Val	Thr 185	Gln	Glu	Glu	Leu	Gly 190	Gly	Ala
Lys	Thr	His 195	Thr	Thr	Met	Ser	Gly 200	Val	Ala	His	Arg	Ala 205	Phe	Glu	Asn

ASP	210	Азр	Ата	neu	Cys	215	Ten	wrd	wsb	FIIC	220	ASII	Tyr	nea	FIC
Leu 225	Ser	Ser	Gln	Asp	Pro 230	Ala	Pro	Val	Arg	Glu 235		His	Asp	Pro	Se1
Asp	Arg	Leu	Val	Pro 245	Glu	Leu	Asp	Thr	11e 250		Pro	Leu	Glu	Ser 255	Thi
Lys	Ala	Tyr	Asn 260	Met	Val	Asp	Ile	Ile 265		Ser	Va1	Val	Asp 270	Glu	Arg
Glu	Phe	Phe 275	Glu	Ile	Met	Pro	Asn 280	Туг	Ala	Lys	Asn	Ile 285		Val	Gly
Phe	Ala 290	Arg	Met	Asn	Gly	Arg 295	Thr	Val	Gly	Ile	Val 300	Gly	Asn	Gln	Pro
Lys 305	Val	Ala	Ser	Gly	Cys 310	Leu	Asp	Ile	Asn	Ser 315	Ser	Val	Lys	Gly	Ala 320
Arg	Phe	Val	Arg	Phe 325	Cys	Asp	Ala	Phe	Asn 330	Ile	Pro	Leu	Ile	Thr 335	Phe
Val	Asp	Val	Pro 340	Gly	Phe	Leu	Pro	Gly 345	Thr	Ala	Gln	Glu	Tyr 350	Gly	Gly
Ile	Ile	Arg 355	His	Gly	Ala	Lys	Leu 360	Leu	Tyr	Ala	Phe	Ala 365	Glu	Ala	Thr
Val	Pro 370	Lys	Val	Thr	Val	Ile 375	Thr	Arg	Lys	Ala	Tyr 380	Gly	Gly	Ala	Tyr
Asp 385	Val	Met	Ser	Ser	Lys 390	His	Leu	Cys	Gly	Asp 395	Thr	Asn	Tyr	Ala	Trp 400
Pro	Thr	Ala	Glu	Ile 405	Ala	Val	Met	Gly	Ala 410	Lys	Gly	Ala	Val	Glu 415	Ile
Ile	Phe	Lys	Gly 420	His	Glu	Asn	Val	Glu 425	Ala	Ala	Gln	Ala	Glu 430	Tyr	Ile
Glu	Lys	Phe 435	Ala	Asn	Pro	Phe	Pro 440	Ala	Ala	Val	Arg	Gly 445	Phe	Val	Asp
Asp	Ile 450	Ile	Gln	Pro	Ser	Ser 455	Thr	Arg	Ala	Arg	Ile 460	Cys	Cys	Asp	Leu
Asp 165	Val	Leu	Ala	Ser	Lys 470	Lys	Val	Gln	Arg	Pro 475	Trp	Arg	Lys	His	Ala 480

Asn Ile Pro Leu

WO 00/55350

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<210> 1141
<211> 59
<212> PRT
<213> Homo sapiens
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<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (53)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1141
Leu Xaa Glu Leu Glu Arg Tyr Val Thr Ser Cys Leu Arg Lys Lys Arg
      5
                                  10
Lys Pro Gln Ala Glu Lys Val Asp Val Ile Ala Gly Ser Ser Lys Met
Lys Gly Phe Ser Ser Ser Glu Ser Glu Ser Ser Ser Glu Ser Ser
         35
                            40
Ser Asp Ser Glu Xaa Xaa Glu Thr Gly Pro Ala
    50
                        55
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<210> 1142
<211> 199
<212> PRT
<213> Homo sapiens
<400> 1142
Ser Gly Tyr Lys Thr Ile Ser Ala Met Gln Thr Ile Lys Cys Val Val
1 5 10 15

Val Gly Asp Gly Ala Val Gly Lys Thr Cys Leu Leu Ile Ser Tyr Thr

1151

25 Thr Asn Lys Phe Pro Ser Glu Tyr Val Pro Thr Val Phe Asp Asn Tyr Ala Val Thr Val Met Ile Gly Gly Glu Pro Tyr Thr Leu Gly Leu Phe Asp Thr Ala Gly Gln Glu Asp Tyr Asp Arg Leu Arg Pro Leu Ser Tyr 70 75 Pro Gln Thr Asp Val Phe Leu Val Cys Phe Ser Val Val Ser Pro Ser Ser Phe Glu Asn Val Lys Glu Lys Trp Val Pro Glu Ile Thr His His 100 105 Cys Pro Lys Thr Pro Phe Leu Leu Val Gly Thr Gln Ile Asp Leu Arg 120 Asp Asp Pro Ser Thr Ile Glu Lys Leu Ala Lys Asn Lys Gln Lys Pro 135 Ile Thr Pro Glu Thr Ala Glu Lys Leu Ala Arg Asp Leu Lys Ala Val Lys Tyr Val Glu Cys Ser Ala Leu Thr Gln Lys Gly Leu Lys Asn Val 170 Phe Asp Glu Ala Ile Leu Ala Ala Leu Glu Pro Pro Glu Pro Lys Lys 185 Ser Arg Arg Cys Val Leu Leu 195

<210> 1143 <211> 171

<212> PRT

<213> Homo sapiens

<400> 1143

Gly Asp Leu Asp Cys Pro Asp Trp Val Leu Ala Glu Ile Ser Thr Leu 1 5 10 15

Ala Lys Met Tyr Glu Lys Ile Leu Lys Leu Thr Ala Asp Ala Lys Phe 20 25 30

Glu Ser Gly Asp Val Lys Ala Thr Val Ala Val Leu Ser Phe Ile Leu $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Ser Ser Ala Ala Lys His Ser Val Asp Gly Glu Ser Leu Ser Ser Glu 50 55 60

Leu Gln Gln Leu Gly Leu Pro Lys Glu His Ala Ala Ser Leu Cys Arg
65 70 75 80

Cys Tyr Glu Glu Lys Gln Ser Pro Leu Gln Lys His Leu Arg Val Cys 85 90 95

Ser Leu Arg Met Asn Arg Leu Ala Gly Val Gly Trp Arg Val Asp Tyr
100 105 110

Thr Leu Ser Ser Ser Leu Leu Gln Ser Val Glu Glu Pro Met Val His
115 120 125

Leu Arg Leu Glu Val Ala Ala Pro Gly Thr Pro Ala Gln Pro Val 130 135 140

Ala Met Ser Leu Ser Ala Asp Lys Phe Gln Val Leu Leu Ala Glu Leu 145 150 155 160

Lys Gln Ala Gln Thr Leu Met Ser Ser Leu Gly 165 170

<210> 1144

<211> 151

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (22)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (38)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (40)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1144

Gln Trp Arg Gln Gly Val Gln Gly Arg Ser Ala Ser Gly Thr Ser Thr 1 5 10 15

1153

Cys Arg Val Ala Arg Xaa Gly Gln Asp Trp Pro Ala Ala Ser Pro Gly 20 25 30

Val Asn Leu Arg Asn Xaa Phe Xaa Pro Pro Leu Leu Leu Ala Pro Val 35 40 45

Pro Thr Pro Val Ala Pro Ser Leu Gly Ser Pro Leu Leu Leu Ser His 50 55 60

Pro Glu Arg Gln Ser Gly Pro Val Thr Gly Gly Ala Gly Glu Gly His 65 70 75 80

Arg Cys Ala Ser Pro Gln Thr Val Cys Gln Val Ser Glu Leu Val Thr 85 90 95

Arg Pro Ala Ala Gln Pro Ser Ala Ala Ala Gln Pro Ala Ala Pro Ala
100 105 110

Gly Gly Arg Thr Pro Gly Arg Ala Gly Pro His Leu Pro Ile Tyr Lys 115 120 125

Ile Gly Gln Gly Asn Met Lys Ala Asp Leu Gln Ala Ala Ala Thr Ala 130 135 140

Lys Pro Gly Lys Ser Gln Gln 145 150

<210> 1145

<211> 70

<212> PRT

<213> Homo sapiens

<400> 1145

Ala Asp Ile Ala Gly Val Leu Ala Ile Arg Pro Asp Glu Leu Arg Phe
1 5 10 15

Arg Tyr Ser Met Val Ala Tyr Trp Arg Gln Ala Gly Leu Ser Tyr Ile \$20\$ \$25\$ 30

Arg Tyr Ser Gln Ile Cys Ala Lys Ala Val Arg Asp Ala Leu Lys Thr 35 40 45

Glu Phe Lys Ala Asn Ala Glu Lys Thr Ser Gly Ser Asn Val Lys Ile 50 55 60

Val Lys Val Lys Lys Glu 65 70

<210> 1146 <211> 166 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (56) <223> Xaa equals any of the naturally occurring L-amino acids Leu His Ala Asn Gln Val Ile His Arg Asp Ile Lys Ser Asp Asn Val 10 Leu Leu Gly Met Glu Gly Ser Val Lys Leu Thr Asp Phe Gly Phe Cys 25 Ala Gln Ile Thr Pro Glu Gln Ser Lys Arg Ser Thr Met Val Gly Thr Pro Tyr Trp Met Ala Pro Glu Xaa Val Thr Arg Lys Ala Tyr Gly Pro 55 Lys Val Asp Ile Trp Ser Leu Gly Ile Met Ala Ile Glu Met Val Glu 70 Gly Glu Pro Pro Tyr Leu Asn Glu Asn Pro Leu Arg Ala Leu Tyr Leu Ile Ala Thr Asn Gly Thr Pro Glu Leu Gln Asn Pro Glu Lys Leu Ser 105 Pro Ile Phe Arg Asp Phe Leu Asn Arg Cys Leu Glu Met Asp Val Glu 120 125 115 Lys Arg Gly Ser Ala Lys Glu Leu Leu Gln His Pro Phe Leu Lys Leu Ala Lys Pro Leu Ser Ser Leu Thr Pro Leu Ile Met Ala Ala Lys Glu 145 150 155

<210> 1147

<211> 420

<212> PRT

<213> Homo sapiens

Ala Met Lys Ser Asn Arg

<220>

<22	1> S	ITE													
<22	2> (203)													
<22	3> X	aa e	qual	s an	y of	the	nat	ural	1y c	ccur	ring	L-a	mino	aci	ds
<40	0> 1	147													
Cys 1		Pro	Phe	Ser 5		Arg	Val	Pro	Pro 10		Ala	Gly	Leu	Ala 15	
Leu	Pro	Ser	Pro 20		Leu	Met	Ala	Leu 25		Arg	Arg	Pro	Thr 30	Val	Se
Ser	Asp	Leu 35		Asn	Ile	Asp	Thr 40	_	Val	Asn	Ser	Lys 45		Lys	Se
His	Val 50		Ile	Arg	Arg	Thr 55		Leu	Glu	Glu	Ile 60	Gly	Asn	Arg	۷a:
Thr 65	Thr	Arg	Ala	Ala	Gln 70	Val	Ala	Lys	Lys	Ala 75	Gln	Asn	Thr	Lys	Va]
Pro	Val	Gln	Pro	Thr 85		Thr	Thr	Asn	Val 90		Lys	Gln	Leu	Lys 95	Pro
Thr	Ala	Ser	Val 100	Lys	Pro	Val	Gln	Met 105	Glu	Lys	Leu	Ala	Pro 110	Lys	Gly
Pro	Ser	Pro 115	Thr	Pro	Glu	Asp	Val 120		Met	Lys	Glu	Glu 125	Asn	Leu	Cys
31n	Ala 130	Phe	ser	Asp	Ala	Leu 135	Leu	Cys	Lys	Ile	Glu 140	Asp	Ile	Asp	Asr
31u 145	Asp	Trp	Glu	Asn	Pro 150	Gln	Leu	Cys	Ser	Asp 155	туr	Val	Lys	Asp	11e
ryr	Gln	Tyr	Leu	Arg 165	Gln	Leu	Glu	Val	Leu 170	Gln	Ser	Ile	Asn	Pro 175	His
?he	Leu	Asp	Gly 180	Arg	Asp	Ile	Asn	Gly 185	Arg	Met	Arg	Ala	Ile 190	Leu	Val
Asp	Trp	Leu 195	Val	Gln	Val	His	ser 200	Lys	Phe	Xaa	Leu	Leu 205	Gln	Glu	Thr
eu	Туг 210	Met	Cys	Val	Gly	Ile 215	Met	Asp	Arg	Phe	Leu 220	Gln	Val	Gln	Pro
al 25	Ser	Arg	Lys	Lys	Leu 230	Gln	Leu	Val	Gly	11e 235	Thr	Ala	Leu	Leu	Leu 240

Ala Ser Lys Tyr Glu Glu Met Phe Ser Pro Asn Ile Glu Asp Phe Val 250 245 Tyr Ile Thr Asp Asm Ala Tyr Thr Ser Ser Glm Ile Arg Glu Met Glu 260 Thr Leu Ile Leu Lys Glu Leu Lys Phe Glu Leu Gly Arg Pro Leu Pro 280 Leu His Phe Leu Arg Arg Ala Ser Lys Ala Gly Glu Val Asp Val Glu 295 Gln His Thr Leu Ala Lys Tyr Leu Met Glu Leu Thr Leu Ile Asp Tyr 315 Asp Met Val His Tyr His Pro Ser Lys Val Ala Ala Ala Ala Ser Cys Leu Ser Gln Lys Val Leu Gly Gln Gly Lys Trp Asn Leu Lys Gln Gln 345 Tyr Tyr Thr Gly Tyr Thr Glu Asn Glu Val Leu Glu Val Met Gln His 355 360 365 Met Ala Lys Asn Val Val Lys Val Asn Glu Asn Leu Thr Lys Phe Ile 375 Ala Ile Lys Asn Lys Tyr Ala Ser Ser Lys Leu Leu Lys Ile Ser Met Ile Pro Gln Leu Asn Ser Lys Ala Val Lys Asp Leu Ala Ser Pro Leu 410 Ile Gly Arg Ser 420

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<211> 249
<212> PRT
<213> Homo sapiens
<220>
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<222> (244)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1148

Gln Ser Asn Ala Val Trp Leu Leu Gly His Leu His Leu Ser Thr Leu

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Ser	Ser	Ser	Gln 20	Ser	Arg	Ala	Ser	Val 25	Pro	Thr	Asp	туг	ser 30	Tyr	Leu
Pro	Glu	Ser 35	Ser	Phe	Ile	Gly	Ala 40	Ala	Ile	Gly	Phe	Phe 45	Ile	Thr	Gly
Gly	Lys 50	Lys	Gly	Pro	Glu	Ser 55	Val	Pro	Pro	Ser	Leu 60	Leu	Lys	Val	Val
Met 65	Lys	Pro	Ile	Ala	Thr 70	Val	Gly	Glu	Ser	Tyr 75	Gln	Tyr	Pro	Pro	Val 80
Asn	Trp	Ala	Ala	Leu 85	Leu	Ser	Pro	Leu	Met 90	Arg	Leu	Asn	Phe	Gly 95	Glu
Glu	Ile	Gln	Gln 100	Leu	Cys	Leu	Glu	Ile 105	Met	Val	Thr	Gln	Ala 110	Gln	Ser
Ser	Gln	Asn 115	Ala	Ala	Ala	Leu	Leu 120	Gly	Leu	Trp	Val	Thr 125	Pro	Pro	Leu
Ile	His 130	Ser	Leu	Ser	Leu	Asn 135	Thr	Lys	Arg	Tyr	Leu 140	Leu	Ile	Ser	Ala
Pro 145	Leu	Trp	Ile	Lys	His 150	Ile	Ser	Asp	Glu	Gln 155	Ile	Leu	Gly	Phe	Val 160
Glu	Asn	Leu	Met	Val 165	Ala	Val	Phe	Lys	Ala 170	Ala	Ser	Pro	Leu	Gly 175	Ser
Pro	Glu	Leu	Cys 180	Pro	Ser	Ala	Leu	His 185	Gly	Leu	Ser	Gln	Ala 190	Met	Lys
Leu	Pro	Ser 195	Pro	Ala	His	His	Leu 200	Trp	Ser	Leu	Leu	Ser 205	Glu	Ala	Thr
Gly	Lys 210	Ile	Phe	Asp	Leu	Leu 215	Pro	Asn	Lys	Ile	Arg 220	Arg	Lys	Asp	Leu
Glu 225	Leu	Tyr	Ile	Ser	Ile 230	Ala	Lys	Cys	Leu	Leu 235	Glu	Met	Thr	Asp	Asp 240
Asp	Ala	Asn	Xaa	Asp 245	Arg	Pro	Gly	Tyr							

<210> 1149 <211> 239

<212>	PRT	
<213>	Homo	sapiens

<400> 1149

Arg Asp Pro Pro Arg Pro Val Gln Ser Gly Leu Gly Ala Ala Gly Thr $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Leu Ser Trp Leu Pro Pro Pro Glu Gln Pro Val Leu Val Pro Arg Leu 20 25 30

Pro Ala Pro Arg Pro Val Met Thr Leu Arg Pro Ser Leu Leu Pro Leu 35 40 45

His Leu Leu Leu Leu Leu Leu Ser Ala Ala Val Cys Arg Ala Glu 50 60

Ala Gly Leu Glu Thr Glu Ser Pro Val Arg Thr Leu Gln Val Glu Thr 65 70 75 80

Leu Val Glu Pro Pro Glu Pro Cys Ala Glu Pro Ala Ala Phe Gly Asp 85 90 95

Thr Leu His Ile His Tyr Thr Gly Ser Leu Val Asp Gly Arg Ile Ile 100 105 110

Asp Thr Ser Leu Thr Arg Asp Pro Leu Val Ile Glu Leu Gly Gln Lys
115 120 125

Gln Val Ile Pro Gly Leu Glu Gln Ser Leu Leu Asp Met Cys Val Gly 130 135 140

Glu Lys Arg Arg Ala Ile Ile Pro Ser His Leu Ala Tyr Gly Lys Arg 145 150 155 160

Gly Phe Pro Pro Ser Val Pro Ala Asp Ala Val Val Gln Tyr Asp Val 165 170 175

Glu Leu Ile Ala Leu Ile Arg Ala Asn Tyr Trp Leu Lys Leu Val Lys 180 185 190

Gly Ile Leu Pro Leu Val Gly Met Ala Met Val Pro Ala Leu Leu Gly
195 200 205

Leu Ile Gly Tyr His Leu Tyr Arg Lys Ala Asn Arg Pro Lys Val Ser 210 215 220

Lys Lys Lys Leu Lys Glu Glu Lys Arg Asn Lys Ser Lys Lys 225 230 235

<21	0> 1	150													
	1> 3														
	2> P														
<21	3> н	omo	sapi	ens											
<22	0>														
<22	1> s	ITE													
<22	2> (3)													
<22	3> X	aa e	qual	s an	y of	the	nat	ural	ly o	ccur	ring	L∽a	mino	aci	ds
<40	0> 1	150													
Ala 1	Glu	Xaa	Gly	Lys 5	Thr	Glu	Trp	Leu	Phe 10		Met	Asp	Glu	Gly 15	Arg
Lys	Gln	Leu	Ala 20	Ala	Ser	Ala	Gly	Phe 25	Arg	Arg	Leu	Ile	Thr 30	Val	Ala
Leu	His	Arg 35	Gly	Gln	Gln	Tyr	Glu 40	Ser	Met	Asp	His	Ile 45	Gln	Ala	Glu
Leu	Ser 50	Ala	Arg	Val	Met	Glu 55	Leu	Ala	Pro	Ala	Gly 60	Met	Pro	Thr	Gln
G1n 65	Gln	Val	Pro	Phe	Leu 70	Ser	Val	Gly	Gly	Asp 75	Ile	Gly	Val	Arg	Thr
Val	Gln	His	Gln	Asp 85	Cys	Ser	Pro	Leu	Ser 90	Gly	Asp	Туr	Val	Ile 95	Glu
Asp	Val	Gln	Gly 100	Asp	Asp	Lys	Arg	Туг 105	Phe	Arg	Arg	Leu	Ile 110	Phe	Leu
Ser	Asn	Arg 115	Asn	Val	Val	Gln	Ser 120	Glu	Ala	Arg	Leu	Leu 125	Lys	Asp	Val
Ser	His 130	Lys	Ala	Gln	Lys	Lys 135	Arg	Lys	Lys	Asp	Arg 140	Lys	Lys	Gln	Arg
Pro 145	Ala	Asp	Ala	Glu	Asp 150	Leu	Pro	Ala	Ala	Pro 155	Gly	Gln	Ser	Ile	Asp 160
Lys	Ser	Tyr	Leu	Cys 165	Cys	Glu	His	His	Lys 170	Ala	Met	Ile	Ala	Gly 175	Leu

His Phe Pro Lys Ser Cys Ile Asp Ala Val Glu Ile Asp Pro Ser Met

Ala Leu Leu Arg Asn Pro Glu Leu Leu Glu Ile Pro Leu Ala Leu 180 185 190

Leu Val Val Gly Leu Gly Gly Gly ser Leu Pro Leu Phe Val His Asp 195 200 205

1160

210 215 220 Leu Glu Val Ala Thr Gln Trp Phe Gly Phe Ser Gln Ser Asp Arg Met 235 225 230 Lys Val His Ile Ala Asp Gly Leu Asp Tyr Ile Ala Ser Leu Ala Gly Gly Glu Ala Arg Pro Cys Tyr Asp Val Ile Met Phe Asp Val Asp 265 Ser Lys Asp Pro Thr Leu Gly Met Ser Cys Pro Pro Pro Ala Phe Val 280 Glu Gln Ser Phe Leu Gln Lys Val Lys Ser Ile Leu Thr Pro Glu Gly 295 Val Phe Ile Leu Asn Leu Val Cys Arg Asp Leu Gly Leu Lys Asp Ser Val Leu Ala Gly Leu Lys Ala Val Phe Pro Leu Leu Tyr Val Arg Arg 325 330 Ile Glu Gly Glu Val Asn Glu Ile Leu Phe Cys Gln Leu His Pro Glu 345 Gln Lys Leu Ala Thr Pro Glu Leu Leu Glu Thr Ala Gln Ala Leu Glu 360 Arg Thr Leu Arg Lys Pro Gly Arg Gly Trp Asp Asp Thr Tyr Val Leu Ser Asp Met Leu Lys Thr Val Lys Ile Val 385 390 <210> 1151 <211> 111 <212> PRT <213> Homo sapiens <400> 1151

Val Asn Val Asn Asn Pro Ser Leu Cys His Ser Ser His Leu Val Asp

Leu Gly Ser Gly Ser Val Glu Phe Cys Ala Trp Glu Trp Ser Trp Arg 20 25 30

Glu Trp Gly Leu Cys Thr Ala Ala Thr Ser Pro Arg Ser Ser His Leu
35 40 45

10

Pro Ala Pro Arg Pro Gly Cys Met Ala Ala Pro Val Cys Val Gln Arg Ser Val Ser His Pro Leu His Leu Leu Ser Gly Gly Leu Gly Ser Pro Thr Cys Cys Gln Asp Leu Gly Ala Ile Lys Tyr Ser Gly Phe Val Lys 105 <210> 1152 <211> 172 <212> PRT <213> Homo sapiens <400> 1152 Leu Gly Asp Thr Ile Glu Gly Arg Leu Gln Val Pro Val Arg Asn Ser Arg Val Asp Pro Arg Val Arg Ala Arg Gly Ala Asp Arg Met Gly Lys Cys Arg Gly Leu Arg Thr Ala Arg Lys Leu Arg Ser His Arg Arg Asp Gln Lys Trp His Asp Lys Gln Tyr Lys Lys Ala His Leu Gly Thr Ala Leu Lys Ala Asn Pro Phe Gly Gly Ala Ser His Ala Lys Gly Ile Val 70 Leu Glu Lys Val Gly Val Glu Ala Lys Gln Pro Asn Ser Ala Ile Arg Lys Cys Val Arg Val Gln Leu Ile Lys Asn Gly Lys Lys Ile Thr Ala 100 105 Phe Val Pro Asn Asp Gly Cys Leu Asn Phe Ile Glu Glu Asn Asp Glu 120 Val Leu Val Ala Gly Phe Gly Arg Lys Gly His Ala Val Gly Asp Ile 135 Pro Gly Val Arg Phe Lys Val Val Lys Val Ala Asn Val Ser Leu Leu 150 155

1162

Ala Leu Tyr Lys Gly Lys Lys Glu Arg Pro Arg Ser

<210> 1153

<211> 197

<212> PRT

<213> Homo sapiens

<400> 1153

Tyr Trp Cys Glu Gln Cys Asp Val Gln Phe Ser Ser Ser Glu Leu
1 5 10 15

Tyr Leu His Phe Gln Glu His Ser Cys Asp Glu Gln Tyr Leu Cys Gln 20 25 30

Phe Cys Glu His Glu Thr Asn Asp Pro Glu Asp Leu His Ser His Val 35 40 45

Val Asn Glu His Ala Cys Lys Leu Ile Glu Leu Ser Asp Lys Tyr Asn 50 55 60

Asn Gly Glu His Gly Gln Tyr Ser Leu Leu Ser Lys Ile Thr Phe Asp
65 70 75 80

Lys Cys Lys Asn Phe Phe Val Cys Gln Val Cys Gly Phe Arg Ser Arg

Leu His Thr Asn Val Asn Arg His Val Ala Ile Glu His Thr Lys Ile 100 \$105\$ 110

Phe Pro His Val Cys Asp Asp Cys Gly Lys Gly Phe Ser Ser Met Leu

Glu Tyr Cys Lys His Leu Asn Ser His Leu Ser Glu Gly Ile Tyr Leu 130 135 140

Cys Gln Tyr Cys Glu Tyr Ser Thr Gly Gln Ile Glu Asp Leu Lys Ile 145 150 155 160

His Leu Asp Phe Lys His Ser Ala Asp Leu Pro His Lys Cys Ser Asp 165 170 175

Cys Leu Met Arg Phe Gly Asn Glu Arg Glu Leu Ile Ser His Leu Pro 180 185 190

Val His Glu Thr Thr 195

<210> 1154 '

<211> 156

<212> PRT

<213> Homo sapiens

<400> 1154

Ser Ser Ser Ser Asp Ser Glu Gly Ser Ser Leu Pro Val Gln Pro Glu 35 40 45

Val Ala Leu Lys Arg Val Pro Ser Pro Thr Pro Ala Pro Lys Glu Ala 50 55 60

Val Arg Glu Gly Arg Pro Pro Glu Pro Thr Pro Ala Lys Arg Lys Arg 65 70 75 80

Pro Gly Pro Gln Ala Cys Pro Asn Leu Gln Ala Pro Arg Ser His Pro 130 135 140

Leu Ala Ser Gly Gly Pro Ala Ala Pro Gly Ser Gln 145 150 155

<210> 1155

<211> 125

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (73)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

1164

<222> (105) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (122) <223> Xaa equals any of the naturally occurring L-amino acids Pro Glu Ala Pro Arg Gly Val Val Thr Cys Leu Arg Ala Leu Leu Ser His Gln His Gln Thr Arg Pro His Arg Val Pro Gly Thr Met Phe Gly Lys Arg Lys Lys Arg Val Glu Ile Ser Ala Pro Ser Asn Phe Glu His Arg Val His Thr Gly Phe Asp Gln His Glu Gln Lys Phe Thr Gly Leu Pro Arg Gln Trp Gln Ser Leu Ile Xaa Glu Ser Ala Arg Arg Pro Lys 70 75 Pro Leu Val Asp Pro Ala Cys Ile Thr Ser Ile Gln Pro Gly Ala Pro Lys Thr Ile Val Arg Gly Ser Lys Xaa Ala Lys Asp Gly Ala Leu Thr 105 Leu Leu Leu Asp Glu Phe Glu Asn Met Xaa Val Thr Arg 120 <210> 1156 <211> 202 <212> PRT <213> Homo sapiens <400> 1156 Arg Pro Thr Arg Pro Gln Pro Ser Pro Asp Glu Ala Arg Pro Leu Gln 5

Ala Leu Leu Asp Gly Arg Gly Leu Cys Val Asn Ala Ser Ala Val Ser
20 25 30

Arg Leu Arg Ala Tyr Leu Leu Pro Ala Pro Pro Ala Pro Gly Asn Ala

Ser Glu Ser Glu Glu Asp Arg Ser Ala Gly Ser Val Glu Ser Pro Ser

45

40

1165

50 55 60 Val Ser Ser Thr His Arg Val Ser Asp Pro Lys Phe His Pro Leu His 70 75 65 Ser Lys Ile Ile Ile Lys Lys Gly His Ala Lys Asp Ser Gln Arg Tyr Lys Val Asp Tyr Glu Ser Gln Ser Thr Asp Thr Gln Asn Phe Ser Ser Glu Ser Lys Arg Glu Thr Glu Tyr Gly Pro Cys Arg Arg Glu Met 120 Glu Asp Thr Leu Asn His Leu Lys Phe Leu Asn Val Leu Ser Pro Arg 135 Gly Val His Ile Pro Asn Cys Asp Lys Lys Gly Phe Tyr Lys Lys 155 Gln Cys Arg Pro Ser Lys Gly Arg Lys Arg Gly Phe Cys Trp Cys Val 165 170 Asp Lys Tyr Gly Gln Pro Leu Pro Gly Tyr Thr Thr Lys Gly Lys Glu 185 Asp Val His Cys Tyr Ser Met Gln Ser Lys 195 <210> 1157 <211> 269 <212> PRT <213> Homo sapiens Arg Arg Cys Cys His Ser Ala Thr Met Phe Glu Ala Arg Leu Val Gln 5 Gly Ser Ile Leu Lys Lys Val Leu Glu Ala Leu Lys Asp Leu Ile Asn 25 Glu Ala Cys Trp Asp Ile Ser Ser Ser Gly Val Asn Leu Gln Ser Met 35 40 Asp Ser Ser His Val Ser Leu Val Gln Leu Thr Leu Arg Ser Glu Gly Phe Asp Thr Tyr Arg Cys Asp Arg Asn Leu Ala Met Gly Val Asn Leu 70

Thr Ser Met Ser Lys Ile Leu Lys Cys Ala Gly Asn Glu Asp Ile Ile 85 Thr Leu Arg Ala Glu Asp Asn Ala Asp Thr Leu Ala Leu Val Phe Glu 105 Ala Pro Asn Gln Glu Lys Val Ser Asp Tyr Glu Met Lys Leu Met Asp Leu Asp Val Glu Gln Leu Gly Ile Pro Glu Gln Glu Tyr Ser Cys Val 135 Val Lys Met Pro Ser Gly Glu Phe Ala Arg Ile Cys Arg Asp Leu Ser 150 His Ile Gly Asp Ala Val Val Ile Ser Cys Ala Lys Asp Gly Val Lys Phe Ser Ala Ser Gly Glu Leu Gly Asn Gly Asn Ile Lys Leu Ser Gln 185 Thr Ser Asn Val Asp Lys Glu Glu Glu Ala Val Thr Ile Glu Met Asn 195 200 205 Glu Pro Val Gln Leu Thr Phe Ala Leu Arg Tyr Leu Asn Phe Phe Thr 215 220 Lys Ala Thr Pro Leu Ser Ser Thr Val Thr Leu Ser Met Ser Ala Asp 230 235 Val Pro Leu Val Val Glu Tyr Lys Ile Ala Asp Met Gly His Leu Lys Tyr Tyr Leu Ala Pro Lys Ile Glu Asp Glu Glu Gly Ser 260 265 <210> 1158 <211> 639 <212> PRT <213> Homo sapiens

<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (129)

<220> <221> SITE

	!2> (!3> X			.s ar	ıy of	the	nat	ural	.ly c	ccui	ring	L-a	minc	aci	.ds
~ 4.0	۰۵۰ ۱	150													
	_		Met	: Ala		Thr	Gln	Ile	Ser 10	_	a Asp	Glu	. Leu	Asp 15	
Leu	Lys	Glu	Ala 20		Ala	Lys	val	Asp 25		Asr) Ser	Asn	Gly 30		: Ile
Cys	Asp	Туг 35		Leu	His	Glu	Leu 40		Lys	Glu	ı Ala	Asn 45		Pro	Let
Pro	Gly 50	_	. Tàs	Val	Arg	Glu 55	Ile	Ile	Gln	Lys	Leu 60		Leu	Asp	Gl
Asp 65		Asn	Lys	Asp	Gly 70		Ile	Ser	Phe	Asp 75		Phe	Val	Туг	11e
Phe	Gln	Glu	Val	Lys 85	Ser	Ser	Asp	Ile	.Ala 90	_	Thr	Phe	Arg	Lys 95	
Ile	Asn	Arg	Lys 100		Gly	Ile	Cys	Ala 105	Leu	Gly	Gly	Thr	Ser 110	Glu	Let
Ser	Ser	Glu 115	_	Thr	Gln	His	Ser 120	Tyr	ser	Glu	Glu	Glu 125	Lys	Tyr	Ala
Xaa	Val 130	Asn	Trp	Ile	Asn	Lys 135	Ala	Leu	Glu	Asn	Asp 140	Pro	Asp	Cys	Arg
His 145	Val	Ile	Pro	Met	Xaa 150	Pro	Asn	Thr	Asp	Asp 155		Phe	Lys	Ala	Val 160
Gly	Asp	Gly	Ile	Val 165	Leu	Cys	Lys	Met	Ile 170	Asn	Leu	Ser	Val	Pro 175	Asp
Thr	Ile	Asp	Glu 180	Arg	Ala	Ile	Asn	Lys 185	Lys	Lys	Leu	Thr	Pro 190	Phe	Ile
Ile	Gln	Glu 195	Asn	Leu	Asn	Leu	Ala 200	Leu	Asn	Ser	Ala	Ser 205	Ala	Ile	Gly
Суз	His 210	Val	Val	Asn	Ile	Gly 215	Ala	Glu	Asp	Leu	Arg 220	Ala	Gly	Lys	Pro
His 225	Leu	Val	Leu	Gly	Leu 230	Leu	Trp	Gln	Ile	Ile 235	Lys	Ile	Gly	Leu	Phe 240
Ala	Asp	Ile	Glu	Leu 245	Ser	Arg	Asn	Glu	Ala 250	Leu	Ala	Ala	Leu	Leu 255	Arg

Asp	Gly	Glu	Thr 260		Glu	Glu	Leu	Met 265		Leu	Ser	Pro	270		Let
Leu	Leu	Arg 275		Ala	Asn	Phe	His 280		Glu	Asn	Ser	Gly 285		Gln	Lys
Ile	Asn 290		Phe	Ser	Ala	Asp 295	Ile	Lys	Leu	Ile	Asp 300		Ser	Asn	Ser
Val 305	Lys	Asp	Ser	Lys	Ala 310	Tyr	Phe	His	Leu	Leu 315		Gln	Ile	Ala	Pro 320
Lys	Gly	Gln	Lys	Glu 325	Gly	Glu	Pro	Arg	11e 330		Ile	Asn	Met	Ser 335	
Phe	Asn	Glu	Thr 340	Asp	Asp	Leu	Lys	Arg 345	Ala	Glu	Ser	Met	Leu 350	Gln	Glr
Ala	Asp	Lys 355		Gly	Суѕ	Arg	Gln 360		Val	Thr	Pro	Ala 365		Val	Val
Ser	Gly 370		Pro	Lys	Leu	Asn 375	Leu	Ala	Phe	Val	Ala 380		Leu	Phe	Asn
Lys 385	Tyr	Pro	Ala	Leu	Thr 390	Lys	Pro	Glu	Asn	Gln 395	Asp	Ile	Asp	Trp	Thr 400
Leu	Leu	Glu	Gly	Glu 405	Thr	Arg	Glu	Glu	Arg 410		Phe	Arg	Asn	Trp 415	
Asn	Ser	Leu	Gly 420	Val	Asn	Pro	His	Val 425	Asn	His	Leu	Tyr	Ala 430	Asp	Leu
	_	435					Gln 440		-		_	445	-		
	450	-				455	Lys			_	460	_			
165					470		Cys			475					480
			-	485			Val	-	490	. "				495	
			500				Leu	505					510		
lrg	Tyr	Thr 515	Leu	Asn	Val	Leu	Glu 520	Asp	Leu	Gly	Asp	G1y 525	Gln	Lys	Ala

Asn Asp Asp Ile Ile Val Asn Trp Val Asn Arg Thr Leu Ser Glu Ala 530 535 540

Gly Lys Ser Thr Ser Ile Gln Ser Phe Lys Asp Lys Thr Ile Ser Ser 545 550 560

Ser Leu Ala Val Val Asp Leu Ile Asp Ala Ile Gln Pro Gly Cys Ile 565 570 575

Asn Tyr Asp Leu Val Lys Ser Gly Asn Leu Thr Glu Asp Asp Lys His 580 585 590

Asn Asn Ala Lys Tyr Ala Val Ser Met Ala Arg Arg Ile Gly Ala Arg 595 600 605

Val Tyr Ala Leu Pro Glu Asp Leu Val Glu Val Lys Pro Lys Met Val 610 615 620

Met Thr Val Phe Ala Cys Leu Met Gly Arg Gly Met Lys Arg Val 625 630 635

<210> 1159

<211> 63

<212> PRT

<213> Homo sapiens

<400> 1159

Thr Ile Trp Pro Leu Asn Phe His Arg Lys Asn Asp Pro Thr Phe Leu

1 5 10 15

Ser Met Ser Tyr Leu Ile Ser Arg Ser Trp Asp Gly Leu Thr Ile Leu $20 \hspace{1.5cm} 25 \hspace{1.5cm} 30$

Val Tyr Ile Leu Asp Thr Glu Arg Cys Tyr Ala Ser Val Ile Ile Pro 35 40 45

Arg Leu Glu Ile Gly Arg Ala Lys Lys Val Leu Leu Phe Phe Leu 50 55 60

<210> 1160

<211> 207

<212> PRT

<213> Homo sapiens

<400> 1160

Glu Val Tyr Gly Gly Ser Leu Asp Lys Glu Phe Asp Glu Ser Ser Pro

10 15 1 Lys Gln Pro Thr Asn Pro Tyr Ala Ser Ser Lys Ala Ala Ala Glu Cys Phe Val Gln Ser Tyr Trp Glu Gln Tyr Lys Phe Pro Val Val Ile Thr Arg Ser Ser Asn Val Tyr Gly Pro His Gln Tyr Pro Glu Lys Val Ile 55 Pro Lys Phe Ile Ser Leu Leu Gln His Asn Arg Lys Cys Cys Ile His Gly Ser Gly Leu Gln Thr Arg Asn Phe Leu Tyr Ala Thr Asp Val Val Glu Ala Phe Leu Thr Val Leu Lys Lys Gly Lys Pro Gly Glu Ile Tyr 100 105 Asn Ile Gly Thr Asn Phe Glu Met Ser Val Val Gln Leu Ala Lys Glu 115 120 Leu Ile Gln Leu Ile Lys Glu Thr Asn Ser Glu Ser Glu Met Glu Asn 135 Trp Val Asp Tyr Val Asn Asp Arg Pro Thr Asn Asp Met Arg Tyr Pro Met Lys Ser Glu Lys Ile His Gly Leu Gly Trp Arg Pro Lys Val Pro 170 Trp Lys Glu Gly Ile Lys Lys Thr Ile Glu Trp Tyr Arg Glu Asn Phe His Asn Trp Lys Asn Val Glu Lys Ala Leu Glu Pro Phe Pro Val 200 <210> 1161 <211> 848 <212> PRT <213> Homo sapiens <220>

<223> Xaa equals any of the naturally occurring L-amino acids

<221> SITE <222> (815)

<220>

1171

<22	1> s 2> (844)													
<22	3> X	aa e	qual	s an	y of	the	nat	ural	ly o	ccur	ring	L-a	mino	aci	ds
	0> 1 Leu		Leu	Gly 5		Thr	Met	Ala	Thr 10		Glu	Phe	Ile	Ile 15	Arg
Ile	Pro	Pro	Tyr 20		Tyr	Ile	His	Val 25	Leu	Asp	Gln	Asn	Ser 30	Asn	Val
Ser	Arg	Val 35		Val	Gly	Pro	Lys 40	Thr	Tyr	Ile	Arg	Gln 45	Asp	Asn	Glu
Arg	Val 50	Leu	Phe	Ala	Pro	Met 55	Arg	Met	Val	Thr	Val 60	Pro	Pro	Arg	His
Tyr 65	Суз	Thr	Val	Ala	Asn 70	Pro	Val	Ser	Arg	Asp 75	Ala	Gln	Gly	Leu	Val 80
Leu	Phe	Asp	Val	Thr 85	Gly	Gln	Val	Arg	Leu 90	Arg	His	Ala	Asp	Leu 95	Glu
Ile	Arg	Leu	Ala 100	Gln	Asp	Pro	Phe	Pro 105	Leu	Tyr	Pro	Gly	Glu 110	Val	Leu
Glu	Lys	Asp 115	Ile	Thr	Pro	Leu	Gln 120	Val	Val	Leu	Pro	Asn 125	Thr	Ala	Leu
His	Leu 130	Lys	Ala	Leu	Leu	Asp 135	Phe	Glu	Asp	Lys	Asp 140	Gly	Asp	Lys	Val
Val 145	Ala	Gly	Asp	Glu	Trp 150	Leu	Phe	Glu	Gly	Pro 155	Gly	Thr	Tyr	Ile	Pro 160
Arg	Lys	Glu	Val	Glu 165	Val	Val	Glu	Ile	Ile 170	Gln	Ala	Thr	Ile	Ile 175	Arg
Gln	Asn	G1n	Ala 180	Leu	Arg	Leu	Arg	Ala 185	Arg	Lys	Glu	Cys	Trp 190	Asp	Arg
Asp	Gly	Lys 195	Glu	Arg	Val	Thr	Gly 200	Glu	Glu	Trp	Leu	Val 205	Thr	Thr	Val
Gly	Ala 210	Tyr	Leu	Pro	Ala	Val 215	Phe	Glu	Glu	Val	Leu 220	Asp	Leu	Val	Asp
Ala 225	Val	Ile	Leu	Thr	Glu 230	Lys	Thr	Ala	Leu	His 235	Leu	Arg	Ala	Arg	Arg 240

Asn Phe Arg Asp Phe Arg Gly Val Ser Arg Arg Thr Gly Glu Glu Trp

					245	5				250)				255	5
	Leu	ı Val	L Thi	r Va] 260		ı Asp	Thr	Glu	265		s Va	l Pro	Asp	7 Val		5 Glu
	Glu	ı Val	L Let 275	ı Gly	/ Val	l Val	. Pro	280		Thi	: Le	ı Gly	285		. Asr	туг
	Cys	Val 290		e Leu	Asp	Pro	Val 295		Pro	Asp	Gly	7 Lys 300		ı Glr	Leu	Gly
	Gln 305		Arg	y Val	. Val	. Lys 310	_	Glu	Lys	s Sei	315		e Leu	ı Glm	Pro	Gly 320
	Glu	Glr	Lev	ı Glu	325	_	Ile	Gln	Asp	330	_	. Val	. Leu	ser	335	
•	Gln	Gly	Leu	Leu 340		Arg	Ala	Leu	Gln 345		Leu	Glu	Glu	350		Asp
•	Glu	Glu	Lys 355	Val	Ser	His	Gln	Ala 360	_	Asp	His	Trp	365		Arg	Gly
1	Pro	Leu 370		Tyr	Val	Pro	Ser 375		Lys	Val	Glu	Val 380		Glu	Glu	Arg
	31n 385	Ala	Ile	Pro	Leu	Asp 390	Glu	Asn	Glu	Gly	11e 395	_	Val	Gln	Asp	Val 400
1	Lys	Thr	Gly	Ļys	Val 405	Arg	Ala	Val	Ile	Gly 410		Thr	Tyr	Met	Leu 415	
C	3ln	Asp	Glu	Val 420	Leu	Trp	Glu	Lys	Glu 425	Leu	Pro	Pro	Gly	Val 430	Glu	Glu
1	Leu	Leu	Asn 435	Lys	Gly	Gln	Asp	Pro 440	Leu	Ala	Asp	Arg	Gly 445	Glu	Lys	Asp
J	hr	Ala 450	Lys	Ser	Leu	Gln	Pro 455	Leu	Ala	Pro	Arg	Asn 460	Lys	Thr	Arg	Val
	7al 65	Ser	Tyr	Arg	Val	Pro 470	His	Asn	Ala	Ala	Val 475	Gln	Val	Туг	Asp	Tyr 480
A	rg	Glu	Lys	Arg	Ala 485	Arg.	Val	Val	Phe	Gly 490	Pro	Glu	Leu	Val	Ser 495	Leu
G	ly	Pro	Glu	Glu 500	Gln	Phe	Thr	Val	Leu 505	Ser	Leu	Ser	Ala	Gly 510	Arg	Pro
L	ys	Arg	Pro	His	Ala	Arg	Arg	Ala	Leu	Суз	Leu	Leu	Leu	Gly	Pro	Asp

		515					520					525	i		
Phe	Phe 530		Asp	Val	Ile	Thr 535		Glu	Thr	Ala	Asp 540		Ala	Arg	Le
Gln 545		Gln	Leu	Ala	Tyr 550		Trp	His	Phe	Glu 555	Val	Asn	Asp	Arg	Lys 560
Asp	Pro	Gln	Glu	Thr 565		Lys	Leu	Phe	Ser 570		Pro	Asp	Phe	Val 575	_
Asp	Ala	Cys	Lys 580		Ile	Ala	Ser	Arg 585		Arg	Gly	Ala	. Val 590		Sea
Val	Thr	Phe 595	_	Asp	Phe	His	Lys 600		Ser	Ala	Arg	Ile 605		Arg	Thi
Ala	Val 610		Gly	Phe	Glu	Thr 615		Glu	Ala	Lys	Gly 620		Asp	Gly	Met
Ala 625	Leu	Pro	Arg	Pro	Arg 630	Asp	Gln	Ala	Val	Phe 635	Pro	Gln	Asn	Gly	Le:
Val	Val	Ser	Ser	Val 645	Asp	Val	Gln	Ser	Val 650		Pro	Val	Asp	Gln 655	Arg
Thr	Arg	Asp	Ala 660	Leu	Gln	Arg	Ser	Val 665	Gln	Leu	Ala	Ile	G1u 670	Ile	Thr
Thr	Aşn	Ser 675	Gln	Glu	Ala	Ala	Ala 680	Lys	His	Glu	Ala	Gln 685	Arg	Leu	Glu
Gln	Glu 690	Ala	Arg	Gly	Arg	Leu 695	Glu	Arg	Gln	Lys	Ile 700	Leu	Asp	Gln	Ser
Glu 705	Ala	Glu	Lys	Ala	Arg 710	Lys	Glu	Leu	Leu	Glu 715	Leu	Glu	Ala	Leu	Ser 720
Met	Ala	Val	Glu	Ser 725	Thr	Gly	Thr	Ala	Lys 730	Ala	Glu	Ala	Glu	Ser 735	Arg
Ala	Glu	Ala	Ala 740	Arg	Ile	G1u	G1y	Glu 745	Gly	Ser	Val	Leu	Gln 750	Ala	Lys
Leu	Lys	Ala 755	Gln	Ala	Leu	Ala	Ile 760	Glu	Thr	Glu	Ala	Glu 765	Leu	Gln	Arg
Val	Gln 770	Lys	Val	Arg	Glu	Leu 775	Glu	Leu	Val	Tyr	Ala 780	Arg	Ala	Gln	Leu
31u	Leu	Glu	Val	Ser	Lvs	Ala	Gln	Gln	Leu	Ala	Glu	Val	Glu	Va1	Lvs

1174

785 790 795 800

Lys Phe Lys Gln Met Thr Glu Ala Ile Gly Pro Ser Thr Ile Xaa Asp 805 810

Leu Ala Val Ala Gly Pro Glu Met Gln Val Lys Leu Leu Gln Ser Leu 820 825 830

Gly Leu Lys Ser Thr Leu Ile Thr Asp Gly Phe Xaa Ser Ile Asn Phe 835 840 845

<210> 1162

<211> 58

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (2)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (28)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1162

Phe Xaa Val Gly Ile Val Asn Phe Ser Gln Pro Pro His Ala Ala Gly
1 5 10 15

Glu Cys Gly Cys Ser Ser Ser Glu Met Leu Thr Xaa Lys Arg Glu Val 20 25 30

Lys Gln Ser Arg Tyr Val Gln Pro Cys Leu Gln Asn Pro Ser Leu Ser 35 40 45

Ser Leu Ile Arg Ser Phe Leu Val Phe Tyr 50 55

<210> 1163

<211> 565

<212> PRT

<213> Homo sapiens

			ser Ser	Thr		Ala	Ser	Ala	Gly		Leu	Asp	Ser	Pro 15	
Gly	Gly	Ph∈	Asp 20		Ile	Met	Gln	Val 25		Val	Суѕ	Gly	Ser 30		Ile
Gly	Trp	Arg 35		Val	Thr	Arg	Leu 40		Val	Phe	Ser	Thr 45	Asp	Ala	Gl
Phe	His 50		Ala	Gly	Asp	Gly 55	Lys	Leu	Gly	Gly	Ile 60	Val	Leu	Pro	Ası
Asp 65	_	Gln	Cys	His	Leu 70	Glu	Asn	Asn	Met	Tyr 75	Thr	Met	Ser	His	ТУ1 80
Tyr	Asp	Туr	Pro	Ser 85		Ala	His	Leu	Val 90	Gln	Lys	Leu	Ser	Glu 95	Asr
Asn	Ile	Gln	100		Phe	Ala	Val	Thr 105	Glu	Glu	Phe	Gln	Pro 110	Val	Туг
Lys	Glu	Leu 115	_	Asn	Leu	Ile	Pro 120	Lys	Ser	Ala	Val	Gly 125	Thr	Leu	Ser
Ala	Asn 130	Ser	Ser	Asn	Val	Ile 135	Gln	Leu	Ile	Ile	Asp 140	Ala	Tyr	Asn	Ser
Leu 145	Ser	Ser	Glu	Val	Ile 150	Leu	Glu	Asn	Gly	Lys 155	Leu	Ser	Glu	Gly	Val
Thr	Ile	Ser	Tyr	Lys 165	Ser	Tyr	Cys	ГÀЗ	Asn 170	Gly	Val	Asn	Gly	Thr 175	Gly
Glu	Asn	Gly	Arg 180	Lys	Суз	Ser	Asn	Ile 185	Ser	Ile	Gly	Asp	Glu 190	Val	Gln
Phe	Glu	Ile 195	Ser	Ile	Thr	Ser	Asn 200	Lys	Cys	Pro	Lys	Lys 205	Asp	Ser	Asp
Ser	Phe 210	Lys	Ile	Arg	Pro	Leu 215	Gly	Phe	Thr	Glu	Glu 220	Val	Glu	Val	Ile
Leu 225	Gln	Tyr	Ile	Cys	Glu 230	Cys	Glu	Cys	G1n	Ser 235	Glu	Gly	Ile	Pro	Glu 240
Ser	Pro	Lys	Cys	His 245	Glu	Gly	Asn	Gly	Thr 250	Phe	Glu	Суз	Gly	Ala 255	Cys
Arg	Суз	Asn	Glu 260		Arg	Val	Gly	Arg	His	Суз	Glu		Ser	Thr	Asp

Glu	Val	Asn 275		Glu	Asp	Met	Asp 280		Tyr	. Cys	Arg	Lys 285		Asn	Ser
Ser	Glu 290		cys	Ser	Asn	Asn 295	_	Glu	Суз	Val	Cys 300	Gly	Gln	Cys	Val
Cys 305		Lys	Arg	Asp	Asn 310	Thr	Asn	Glu	Ile	Туг 315		Gly	Lys	Phe	Cys 320
Glu	Суз	Asp	Asn	Phe 325		Cys	Asp	Arg	Ser 330		Gly	Leu	Ile	Cys 335	Gly
Gly	Asn	Gly	Val 340	_	Lys	Cys	Arg	Val 345	Cys	Glu	Cys	Asn	Pro 350	Asn	Tyr
Thr	Gly	Ser 355		Cys	Asp	Cys	Ser 360	Leu	Asp	Thr	Ser	Thr 365	Cys	Glu	Ala
Ser	Asn 370	Gly	Gln	Ile	Cys	Asn 375	Gly	Arg	Gly	Ile	Cys 380	Glu	Cys	Gly	Val
Cys 385	Lys	Cys	Thr	Asp	Pro 390	Lys	Phe	Gln	Gly	Gln 395	Thr	Cys	Glu	Met	Cys 400
Gln	Thr	Суз	Leu	Gly 405	Val	Суз	Ala	Glu	His 410	Lys	Glu	Cys	Val	Gln 415	Суѕ
Arg	Ala	Phe	Asn 420	Lys	Gly	Glu	Lys	Lys 425	Asp	Thr	Cys	Thr	Gln 430	Glu	Cys
Ser	Tyr	Phe 435	Asn	Ile	Thr	Lys	Val 440	Glu	Ser	Arg	Asp	Lys 445	Leu	Pro	Gln
Pro	Val 450	Gln	Pro	Asp	Pro	Va1 455	Ser	His	Суз	Lys	Glu 460	Lys	Asp	Val	Asp
Asp 465	Cys	Trp	Phe	Tyr	Phe 470	Thr	Tyr	Ser	Val	Asn 475	Gly	Asn	Asn	Glu	Val 480
Met	Val	His	Val	Val 485	Glu	Asn	Pro	Glu	Cys 490	Pro	Thr	Gly	Pro	Asp 495	lle
Ile	Pro	Ile	Val 500	Ala	Gly	Val	Val	Ala 505	Gly	Ile	Val	Leu	Ile 510	Gly	Leu
Ala	Leu	Leu 515	Leu	Ile	Trp	Lys	Leu 520	Leu	Met	Ile	Ile	His 525	Asp	Arg	Arg
Glu	Phe 530	Ala	Lys	Phe		Lys 535	Glu	Lys	Met	Asn	Ala 540	Lys	Trp	Asp	Thr

1177

Gly Glu Asn Pro Ile Tyr Lys Ser Ala Val Thr Thr Val Val Asn Pro 545 550 560

Lys Tyr Glu Gly Lys

<210> 1164

<211> 138

<212> PRT

<213> Homo sapiens

<400> 1164

Gly Thr Ala Gly Gly Ala Gly Gly Gln Arg Glu Val Arg Gly Cys Ser 1 5 10 15

Ala Gln Glu Thr Met Ser Gly Gly Ser Ser Cys Ser Gln Thr Pro Ser 20 25 30

Arg Ala Ile Pro Ala Thr Arg Arg Val Val Leu Gly Asp Gly Val Gln \$35\$

Leu Pro Pro Gly Asp Tyr Ser Thr Thr Pro Gly Gly Thr Leu Phe Ser 50 55 60

Thr Thr Pro Gly Gly Thr Arg Ile Ile Tyr Asp Arg Lys Phe Leu Met 65 70 75 80

Glu Cys Arg Asn Ser Pro Val Thr Lys Thr Pro Pro Arg Asp Leu Pro

Thr Ile Pro Gly Val Thr Ser Pro Ser Ser Asp Glu Pro Pro Met Glu
100 105 110

Ala Ser Gln Ser His Leu Arg Asn Ser Pro Glu Asp Lys Arg Ala Gly

Gly Glu Glu Ser Gln Phe Glu Met Asp Ile

<210> 1165

<211> 407

<212> PRT

<213> Homo sapiens

<400> 1165

Ala Ala Cys Gln Pro Arg Cys Cys Cys Ser Ser Cys Cys Gly Thr Ala

1				5					10					15	
Asp	Arg	Ala	Ala 20		Pro	Leu	Ser	Pro 25		Gln	Ala	Pro	Ile 30		Ala
Pro	Ala	Thr 35	Ser	Met	Asp	Ala	Arg 40	Arg	Val	Pro	Gln	Lys 45	Asp	Leu	Arg
Val	Lys 50	Lys	Asn	Leu	Lys	Lys 55	Phe	Arg	Tyr	Val	Lys 60		Ile	Ser	Met
G1u 65	Thr	Ser	Ser	Ser	Ser 70	Asp	Asp	Ser	Cys	Asp 75	Ser	Phe	Ala	Ser	Asp 08
Asn	Phe	Ala	Asn	Thr 85	Arg	Leu	Gln	Ser	Val 90	Arg	Glu	Gly	Суз	Arg 95	Thr
Arg	Ser	Gln	Cys 100	Arg	His	Ser	Gly	Pro 105	Leu	Arg	Val	Ala	Met 110	Lys	Phe
Pro	Ala	Arg 115	Ser	Thr	Arg	Gly	Ala 120	Thr	Asn	Lys	Lys	Ala 125	Glu	Ser	Arg
Gln	Pro 130	Ser	Glu	Asn	ser	Val 135	Thr	Asp	Ser	Asn	Ser 140	Asp	Ser	Glu	Asp
Glu 145	Ser	Gly	Met	Asn	Phe 150	Leu	Glu	ГÀЗ	Arg	Ala 155	Leu	Asn	Ile	Lys	Gln 160
Asn	Lys	Ala	Met	Leu 165	Ala	ГÀЗ	Leu	Met	Ser 170	Glu	Leu	Glu	Ser	Phe 175	Pro
Gly	Ser	Phe	Arg 180	Gly	Arg	His	Pro	Leu 185	Pro	Gly	ser	Asp	Ser 190	Ģln	Ser
Arg	Arg	Pro 195	Arg	Arg	Arg	Thr	Phe 200	Pro	Gly	Val	Ala	Ser 205	Arg	Arg	Asn
Pro	Glu 210	Arg	Arg	Ala	Arg	Pro 215	Leu	Thr	Arg	Ser	Arg 220	Ser	Arg	Ile	Leu
Gly 225	Ser	Leu	Asp	Ala	Leu 230	Pro	Met	Glu	Glu	Glu 235	Glu	Glu	Glu	Asp	Lys 240
Tyr	Met	Leu	Val	Arg 245	Lys	Arg	Lys	Thr	Val 250	Asp	Gly	Tyr	Met	Asn 255	Glu
Asp	Asp	Leu	Pro 260	Arg	Ser	Arg	Arg	ser 265	Arg	Ser	Ser	Val	Thr 270	Leu	Pro
His	Ile	Ile	Arg	Pro	Val	Glu	Glu	Ile	Thr	Glu	Glu	Glu	Leu	Glu	Asn

1179

275 280 285 Val Cys Ser Asn Ser Arg Glu Lys Ile Tyr Asn Arg Ser Leu Gly Ser 295 Thr Cys His Gln Cys Arg Gln Lys Thr Ile Asp Thr Lys Thr Asn Cys Arg Asn Pro Asp Cys Trp Gly Val Arg Gly Gln Phe Cys Gly Pro Cys 330 325 Leu Arg Asn Arg Tyr Gly Glu Glu Val Arg Asp Ala Leu Leu Asp Pro 345 Asn Trp His Cys Pro Pro Cys Arg Gly Ile Cys Asn Cys Ser Phe Cys Arg Gln Arg Asp Gly Arg Cys Ala Thr Gly Val Leu Val Tyr Leu Ala 375 Lys Tyr His Gly Phe Gly Asn Val His Ala Tyr Leu Lys Ser Leu Lys 390 395 Gln Glu Phe Glu Met Gln Ala 405 <210> 1166 <211> 240 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (197) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (201) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (202)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (219)

<22	3> ;	Kaa e	qual	s an	y of	the	nat	ural	ly c	ccur	ring	L-a	mino	aci	ds
		l166 p Gly	' Arg	Pro 5		Gly	Asp	Ala	Phe 10	e Val	Leu	Phe	Ala	Cys 15	Glu
Glu	ту	c Ala	Gln 20		Ala	Leu	Arg	Lys 25	His	. Lys	Asp	Leu	Leu 30	Gly	Lys
Arg	ту	: Ile 35		Leu	Phe	Arg	Ser 40	Thr	Ala	ı Ala	Glu	Val 45	Gln	Gln	Val
Leu	Ası 50		Phe	Ser	Ser	Ala 55	Pro	Leu	Ile	Pro	Leu 60	Pro	Thr	Pro	Pro
Ile 65		e Pro	Val	Leu	Pro 70	Gln	Gln	Phe	Val	. Pro 75	Pro	Thr	Asn	Val	Arg 80
Asp	Cys	; Ile	Arg	Leu 85	Arg	Gly	Leu	Pro	Tyr 90	Ala	Ala	Thr	Ile	Glu 95	Asp
Ile	Let	ı Asp	Phe 100	Leu	Gly	Glu	Phe	Ala 105	Thr	Asp	Ile	Arg	Thr 110	His	Gly
Val	His	Met 115		Leu	Asn	His	Gln 120	Gly	Arg	Pro	Ser	Gly 125	Asp	Ala	Phe
Ile	Glr 130		Lys	Ser	Ala	Asp 135	Arg	Ala	Phe	Met	Ala 140	Ala	Gln	Lys	Суз
His 145	Lys	Lys	Asn	Met	Lys 150	Asp	Arg	Tyr	Val	Glu 155	Val	Phe	Gln	Cys	Ser 160
Ala	Glu	Glu	Met	Asn 165	Phe	Val	Leu	Met	Gly 170	Gly	Thr	Leu	Asn	Arg 175	Asn
Gly	Leu	Ser	Pro 180	Pro	Pro	Суз	Leu	Ser 185	Pro	Pro	Ser	Tyr	Thr 190	Phe	Pro
Ala	Pro	Ala 195	Ala	Xaa	Ile	Pro	Thr 200	Xaa	Xaa	Ala	Ile	Tyr 205	Gln	Pro	Ser
Val	Ile 210		Asn	Pro	Arg	Ala 215	Leu	Gln	Pro	Xaa	Thr 220	Ala	Tyr	Tyr	Pro
Ala 225	Gly	Thr	Gln	Leu	Phe 230	Met	Asn	Tyr	Thr	Ala 235	Tyr	Tyr	Pro	Ser	Val 240

1181

<210> 1167 <211> 106 <212> PRT <213> Homo sapiens <400> 1167 Gly Gly Tyr Ser Val Asp Ser Pro Thr Leu Thr Arg Phe Phe Thr Phe 10 His Phe Ile Leu Pro Phe Ile Ile Ala Ala Leu Ala Ala Leu His Leu 25 Leu Phe Leu His Glu Thr Gly Ser Asn Asn Pro Leu Gly Ile Thr Ser 40 His Ser Asp Lys Ile Thr Phe His Pro Tyr Tyr Thr Ile Lys Asp Ala Leu Gly Leu Leu Leu Phe Leu Leu Ser Leu Met Thr Leu Thr Leu Phe 70 Ser Pro Asp Leu Leu Gly Asp Pro Asp Asn Tyr Thr Leu Ala Asn Pro Leu Asn Thr Pro Pro His Ile Lys Pro Glu 100 105 <210> 1168 <211> 210 <212> PRT <213> Homo sapiens <220> <221> SITE

40

<223> Xaa equals any of the naturally occurring L-amino acids

<222> (53)

<400> 1168

1182

Ala Ala Glu Ala Xaa Gln Val Glu Arg Arg Leu Gln Ser Glu Ser Ala 50 60

Arg Arg Gln Gln Leu Val Glu Lys Glu Val Lys Met Arg Glu Lys Gln 65 70 75 80

Phe Ser Gln Ala Arg Pro Leu Thr Arg Tyr Leu Pro Ile Arg Lys Glu 85 90 95

Asp Phe Asp Leu Lys Thr His Ile Glu Ser Ser Gly His Gly Val Asp 100 105 110

Thr Cys Leu His Val Val Leu Ser Ser Lys Val Cys Arg Gly Tyr Leu 115 120 125

Val Lys Met Gly Gly Lys Ile Lys Ser Trp Lys Lys Arg Trp Phe Val 130 135 140

Phe Asp Arg Leu Lys Arg Thr Leu Ser Tyr Tyr Val Asp Lys His Glu 145 150 150 155 160

Thr Lys Leu Lys Gly Val Ile Tyr Phe Gln Ala Ile Glu Gly Ser Val 165 170 175

Leu Arg Pro Pro Ala Pro Val Gln Pro Arg Arg Gly Phe Ser Ala Ser 180 185 190

Thr Met Val Thr Glu Lys Pro Glu Pro Ser Pro His Leu Leu Arg Lys 195 200 205

Asp Pro 210

<210> 1169

<211> 181

<212> PRT

<213> Homo sapiens

<400> 1169

Thr Ser Lys Met Arg Ser Leu Glu Thr Leu Gly Arg Pro Lys Pro Glu
1 5 10 15

Cys Glu Gly Tyr Asp Pro Asn Ala Leu Tyr Cys Ile Cys Arg Gln Pro

His Asn Asn Arg Phe Met Ile Cys Cys Asp Arg Cys Glu Glu Trp Phe 35 40 45

His Gly Asp Cys Val Gly Ile Ser Glu Ala Arg Gly Arg Leu Leu Glu

1183

55 50 Arg Asn Gly Glu Asp Tyr Ile Cys Pro Asn Cys Thr Ile Leu Gln Val 75 65 70 Gln Asp Glu Thr His Ser Glu Thr Ala Asp Gln Gln Glu Ala Lys Trp Arg Pro Gly Asp Ala Asp Gly Thr Asp Cys Thr Ser Ile Gly Thr Ile Glu Gln Lys Ser Ser Glu Asp Gln Gly Ile Lys Gly Arg Ile Glu Lys 120 Ala Ala Asn Pro Ser Gly Lys Lys Leu Lys Ile Phe Gln Pro Val 135 Ile Glu Ala Pro Gly Ala Ser Lys Cys Ile Gly Pro Gly Cys Cys His 155 Val Ala His Pro Thr Arg Cys Thr Ala Val Met Thr Val Ser Ser Asn 170 Thr Pro Gln Arg Gln 180 <210> 1170 <211> 166 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (3) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (18) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <223> Xaa equals any of the naturally occurring L-amino acids <400> 1170 Ala Gln Xaa Leu Ser Ser Pro Val Arg Gly Ile Ser Gly Glu Gln Ser 10

1184

Thr Xaa Gly Ser Phe Pro Leu Arg Tyr Val Gln Asp Gln Val Ala Ala 20 25 30

Pro Phe Gln Leu Ser Asn His Thr Gly Arg Ile Lys Val Val Phe Thr 35 40 45

Pro Ser Ile Cys Lys Val Thr Cys Thr Lys Gly Ser Cys Gln Asn Ser 50 55 60

Cys Glu Lys Gly Asn Thr Thr Thr Leu Ile Ser Glu Asn Gly His Ala 65 70 75 80

Ala Asp Thr Leu Thr Ala Thr Asn Phe Arg Val Val Ile Cys His Leu 85 90 95

Pro Cys Met Asn Gly Gly Gln Cys Ser Ser Arg Asp Lys Cys Gln Cys 100 105 110

Pro Pro Asn Phe Thr Gly Lys Leu Cys Gln Ile Pro Val His Gly Ala 115 120 125

Ser Val Xaa Lys Leu Tyr Gln His Ser Gln Gln Pro Gly Lys Ala Leu 130 135 140

Gly Thr His Val Ile His Ser Thr His Thr Leu Pro Leu Thr Val Thr 145 150 155 160

Ser Gln Gln Glu Ser Lys 165

<210> 1171

<211> 37

<212> PRT

<213> Homo sapiens

<400> 1171

Asp Leu Ser Val Asn Phe Trp Glu Pro Asn Gly Phe Gly His Asp Phe 1 5 10 15

Pro Ala His Tyr Ile Leu Thr Gln Asn Phe Phe Arg Met Ala Phe Thr 20 25 30

Ser Thr Pro Glu Ile

35

<210> 1172

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<211> 169
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 <213> Homo sapiens
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<400> 1172
Arg Gly Ala Met Val Ser Cys Arg Pro Gly Cys Cys Cys Pro Trp Thr
Pro Ala Val Leu Arg Xaa Ser Val Arg Gly Thr Phe Tyr Ser Pro Pro
             20
                                 25
Glu Ser Phe Ala Gly Ser Asp Asn Glu Ser Asp Glu Glu Val Ala Gly
                             40
Lys Lys Ser Phe Ser Ala Gln Glu Arg Glu Tyr Ile Arg Gln Gly Lys
     50
                         55
Glu Ala Thr Ala Val Xaa Asp Gln Ile Leu Ala Gln Glu Glu Asn Trp
Lys Phe Glu Lys Asn Asn Glu Tyr Gly Asp Thr Val Tyr Thr Ile Glu
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1186

85 90 Val Pro Phe His Gly Lys Thr Phe Ile Leu Lys Thr Phe Leu Pro Cys 100 105 Pro Ala Xaa Xaa Val Tyr Gln Glu Val Ile Leu Gln Pro Glu Arg Met 120 Val Leu Trp Asn Lys Thr Val Thr Ala Cys Gln Ile Leu Gln Arg Val 130 135 Glu Asp Asn Thr Leu Ile Ser Tyr Asp Val Ser Ala Arg Gly Cys Gly Arg Arg Xaa Leu Pro Gln Xaa Thr Ser 165 <210> 1173 <211> 180 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (171) <223> Xaa equals any of the naturally occurring L-amino acids Glu Tyr Gly Asp Thr Val Tyr Thr Ile Glu Val Pro Phe His Gly Lys 10 Thr Phe Ile Leu Lys Thr Phe Leu Pro Cys Pro Ala Glu Leu Val Tyr 25 Gln Glu Val Ile Leu Gln Pro Glu Arg Met Val Leu Trp Asn Lys Thr 40 Val Thr Ala Cys Gln Ile Leu Gln Arg Val Glu Asp Asn Thr Leu Ile Ser Tyr Asp Val Ser Ala Gly Ala Ala Gly Gly Val Val Ser Pro Arg Asp Phe Val Asn Val Arg Arg Ile Glu Arg Arg Arg Asp Arg Tyr Leu

Ser Ser Gly Ile Ala Thr Ser His Ser Ala Lys Pro Pro Thr His Lys

105

Tyr Val Arg Gly Glu Asn Gly Pro Gly Gly Phe Ile Val Leu Lys Ser 115 120 125

Ala Ser Asn Pro Arg Val Cys Thr Phe Val Trp Ile Leu Asn Thr Asp 130 135 140

Thr Met Phe Glu Phe Ala Phe His Leu Arg Xaa Arg Ile Ser Glu Leu 165 170 175

Gly Ala Arg Ala 180

<210> 1174

<211> 436

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (14)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (426)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1174

Arg His Gln Arg Arg Ser Val Trp Arg Ser Arg Gly Xaa Cys Cys

Arg Cys Cys Cys Thr Asn Arg Arg Ser Pro Gln Pro Cys Ala Ser Ser 20 25 30

Leu Pro Pro Arg Thr Gly Glu Lys Gln Pro Arg Asn Phe Met Asn Lys $35 \hspace{1cm} 40 \hspace{1cm} 45$

His Gln Lys Pro Val Leu Thr Gly Gln Arg Phe Lys Thr Arg Lys Arg 50 55 60

Asp Glu Lys Glu Lys Phe Glu Pro Thr Val Phe Arg Asp Thr Leu Val 65 70 75 80

Gln Gly Leu Asn Glu Ala Gly Asp Asp Leu Glu Ala Val Ala Lys Phe
85 90 95

Leu	Asp	Ser	Thr		Ser	Arg	Leu	Asp 105		Arg	Arg	Tyr	110		Thr
Leu	Phe	Asp 115		Leu	Val	Ala	Gly 120		Met	Leu	Ala	Pro 125	-	Gly	Thr
Arg	11e		Asp	Gly	Asp	Lys 135		Lys	Met	Thr	Asn 140		Суз	Val	Phe
Ser 145		Asn	Glu	Asp	His 150		Thr	Ile	Arg	Asn 155	-	Ala	Gln	Val	Phe 160
Asn	Lys	Leu	Ile	Arg 165	Arg	Tyr	Lys	Tyr	Leu 170		Lys	Ala	Phe	Glu 175	Asp
Glu	Met	Lys	Lys 180		Leu	Leu	Phe	Leu 185	Lys	Ala	Phé	Ser	Glu 190	Thr	Glu
Gln	Thr	Lys 195		Ala	Met	Leu	Ser 200	Gly	Ile	Leu	Leu	Gly 205	Asn	Gly	Thr
Leu	Pro 210		Thr	Ile	Leu	Thr 215	Ser	Leu	Phe	Thr	Asp 220	Ser	Leu	Val	Lys
Glu 225	_	Ile	Ala	Ala	Ser 230	Phe	Ala	Val	Lys	Leu 235	Phe	Lys	Ala	Trp	Met 240
Ala	Glu	Lys	Asp	Ala 245	Asn	Ser	Val	Thr	Ser 250	Ser	Leu	Arg	Lys	Ala 255	Asn
Leu	Asp	Lys	Arg 260	Leu	Leu	Glu	Leu	Phe 265	Pro	Val	Asn	Arg	Gln 270	Ser	Val
Asp	His	Phe 275	Ala	Lys	Tyr	Phe	Thr 280	Asp	Ala	Gly	Leu	Lys 285	Glu	Leu	Ser
Asp	Phe 290	Leu	Arg	Val	Gln	Gln 295	Ser	Leu	Gly	Thr	Arg 300	Lys	Glu	Leu	Gln
Lys 305	Glu	Leu	Gln	Glu	Arg 310	Leu	Ser	Gln	Glu	Cys 315	Pro	Ile	Lys	Glu	Val 320
Val	Leu	Tyr	Val	Lys 325	Glu	Glu	Met	Lys	Arg 330	Asn	Asp	Leu	Pro	Glu 335	Thr
Ala	Val	Ile	Gly 340	Leu	Leu	Trp	Thr	Cys 345	Ile	Met	Asn	Ala	Val 350	Glu	Trp
Asn		Lys 355		Glu	Leu		Ala		Gln	Ala	Leu	Lys	His	Leu	Lys

Gln Tyr Ala Pro Leu Leu Ala Val Phe Ser Ser Gln Gly Gln Ser Glu 370 375 380

Leu Ile Leu Leu Gln Lys Val Gln Glu Tyr Cys Tyr Asp Asn Ile His 385 390 395 400

Phe Met Lys Ala Phe Gln Lys Ile Val Leu Pro Tyr Thr Ile Ser Val 405 410 415

Leu Leu Leu Arg Ser Glu His Gln Leu Xaa Ser Cys Arg Phe Gly Thr
420 425 430

Ser Gly Thr Ser 435

<210> 1175

<211> 366

<212> PRT

<213> Homo sapiens

<400> 1175

Thr Glu Pro Val Gly Tyr Thr Lys Ala Glu Glu Pro Ile Ala Met Arg

1 5 10 15

Ser Leu Gly Ala Leu Leu Leu Leu Ser Ala Cys Leu Ala Val Ser
20 25 30

Ala Gly Pro Val Pro Thr Pro Pro Asp Asn Ile Gln Val Gln Glu Asn 35 40 45

Phe Asn Ile Ser Arg Ile Tyr Gly Lys Trp Tyr Asn Leu Ala Ile Gly 50 55

Ser Thr Cys Pro Trp Leu Lys Lys Ile Met Asp Arg Met Thr Val Ser 65 70 75 80

Thr Leu Val Leu Gly Glu Gly Ala Thr Glu Ala Glu Ile Ser Met Thr 85 90 95

Ser Thr Arg Trp Arg Lys Gly Val Cys Glu Glu Thr Ser Gly Ala Tyr 100 105 110

Glu Lys Thr Asp Thr Asp Gly Lys Phe Leu Tyr His Lys Ser Lys Trp 115 120 125

Asn Ile Thr Met Glu Ser Tyr Val Val His Thr Asn Tyr Asp Glu Tyr 130 135 140

Ala Ile Phe Leu Thr Lys Lys Phe Ser Arg His His Gly Pro Thr Ile

145	•				150					155					160
Thr	Ala	Lys	Leu	165	-	Arg	Ala	Pro	Gln 170		Arg	Glu	Thr	Leu 175	
Gln	Asp	Phe	Arg 180		Val	Ala	Gln	Gly 185		Gly	Ile	Pro	Glu 190	Asp	Ser
Ile	Phe	Thr 195		Ala	Asp	Arg	Gly 200		Cys	Val	Pro	G1y 205		Gln	Glu
Pro	Glu 210		Ile	Leu	Ile	Pro 215	_	Val	Arg	Arg	Ala 220		Leu	Pro	Gln
Glu 225		Glu	Gly	Ser	Gly 230		Gly	Gln	Leu	Val 235		Glu	Val	Thr	Lys 240
Lys	Glu	Asp	Ser	Cys 245	Gln	Leu	Gly	Tyr	Ser 250	Ala	Gly	Pro	Cys	Met 255	Gly
Met	Thr	Ser	Arg 260	Tyr	Phe	Tyr	Asn	Gly 265	Thr	Ser	Met	Ala	Cys 270	Glu	Thr
Phe	Gln	Tyr 275	Gly	Gly	Суз	Met	Gly 280	Asn	Gly	Asn	Asn	Phe 285	Val	Thr	Glu
Lys	Glu 290	Cys	Leu	Gln	Thr	Cys 295	Arg	Thr	Val	Ala	Ala 300	Cys	Asn	Leu	Pro
Ile 305	Val	Arg	Gly	Pro	Cys 310	Arg	Ala	Phe	Ile	Gln 315	Leu	Trp	Ala	Phe	Asp 320
Ala	Val	Lys	Gly	Lys 325	Суз	Val	Leu	Phe	Pro 330	Tyr	Gly	Gly	Сув	Gln 335	Gly
Asn	Gly	Asn	Lys 340	Phe	Tyr	Ser	Glu	Lys 345	Glu	Cys	Arg	Glu	Tyr 350	Cys	Gly
Val	Pro	Gly 355	Asp	Gly	Asp	Glu	Glu 360	Leu	Leu	Arg	Phe	ser 365	Asn		
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	> 13 > PR														
			apie	ns											
:22N	>														

<221> SITE <222> (105)

<223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (120) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (126) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1176 Met Pro Arg Ser Ser His His Pro Pro Arg Arg His Tyr His His His His Tyr His Gln Pro Pro Pro Ser Pro Cys Pro Ser Pro Pro Leu Thr Ser Pro Ser Pro Leu Ser Trp Ile Leu Trp Thr Cys Trp Pro Ser Thr Ala Ala Thr Arg Pro Gly Arg Arg Lys Trp Gly Cys Arg Leu Cys Pro 55 Arg His Ser Ser Pro Leu Leu Leu His Leu Asn Leu Leu Ala Trp 70 75 Ala Pro Tyr Pro His Pro Ala Thr Thr Arg Gly Asp Arg Lys Gln Lys 90 Lys Arg Asp Gln Asn Lys Ser Ala Xaa Leu Arg Tyr Arg Gln Arg Lys 105 Gly Ala Gly Gly Val Glu Gly Xaa Gly Lys Gly Lys Leu Xaa Gly Gly 120 Trp Glu Gly Lys Gly 130 <210> 1177 <211> 583 <212> PRT <213> Homo sapiens <400> 1177 Thr Ala Gln Arg Pro Arg Ser Pro Glu Asn Cys Arg Pro Ser Thr Met

10

- Trp Leu Arg Ala Phe Ile Leu Ala Thr Leu Ser Ala Ser Ala Ala Trp
 20 25 30
- Ala Gly His Pro Ser Ser Pro Pro Val Val Asp Thr Val His Gly Lys
 35 40 45
- Val Leu Gly Lys Phe Val Ser Leu Glu Gly Phe Ala Gln Pro Val Ala 50 55 60
- Ile Phe Leu Gly Ile Pro Phe Ala Lys Pro Pro Leu Gly Pro Leu Arg 65 70 75 80
- Phe Thr Pro Pro Gln Pro Ala Glu Pro Trp Ser Phe Val Lys Asn Ala 85 90 95
- Thr Ser Tyr Pro Pro Met Cys Thr Gln Asp Pro Lys Ala Gly Gln Leu 100 105 110
- Leu Ser Glu Leu Phe Thr Asn Arg Lys Glu Asn Ile Pro Leu Lys Leu 115 120 125
- Ser Glu Asp Cys Leu Tyr Leu Asn Ile Tyr Thr Pro Ala Asp Leu Thr 130 135 140
- Lys Lys Asn Arg Leu Pro Val Met Val Trp Ile His Gly Gly Gly Leu 145 150 150 165
- Met Val Gly Ala Ala Ser Thr Tyr Asp Gly Leu Ala Leu Ala Ala His 165 170 175
- Glu Asn Val Val Val Thr Ile Gln Tyr Arg Leu Gly Ile Trp Gly
 180 185 190
- Phe Phe Ser Thr Gly Asp Glu His Ser Arg Gly Asn Trp Gly His Leu 195 200 205
- Asp Gln Val Ala Ala Leu Arg Trp Val Gln Asp Asn Ile Ala Ser Phe 210 215 220
- Gly Gly Asn Pro Gly Ser Val Thr Ile Phe Gly Glu Ser Ala Gly Gly 225 230 235 240
- Glu Ser Val Ser Val Leu Val Leu Ser Pro Leu Ala Lys Asn Leu Phe 245 250 255
- His Arg Ala Ile Ser Glu Ser Gly Val Ala Leu Thr Ser Val Leu Val
 260 265 270
- Lys Lys Gly Asp Val Lys Pro Leu Ala Glu Gln Ile Ala Ile Thr Ala 275 280 285

Gly	Cys 290	-	Thr	Thr	Thr	Ser 295	Ala	Val	. Met	: Val	. His	_	Leu	Arg	Glr
Lys 305		Glu	Glu	Glu	1 Leu 310		Glu	Thr	Thr	Leu 315	_	Met	: Lys	Phe	320
Ser	Leu	Asp	Leu	Gln 325	-	Asp	Pro	Arg	Glu 330		Gln	Pro	Leu	1 Leu 335	_
Thr	Val	Ile	Asp 340		Met	Leu	Leu	Leu 345		Thr	Pro	Glu	350		Gln
Ala	Glu	Arg 355		Phe	His	Thr	Val 360		Tyr	Met	Val	Gly 365		Asn	Lys
Gln	Glu 370		Gly	Trp	Leu	11e 375	Pro	Met	Gln	Leu	Met 380		Tyr	Pro	Leu
ser 385	Glu	Gly	Gln	Leu	Asp 390	Gln	Lys	Thr	Ala	Met 395		Leu	Leu	Trp	Lys 400
Ser	Tyr	Pro	Leu	Val 405	_	Ile	Ala	Lys	Glu 410		Ile	Pro	Glu	Ala 415	
Glu	Lys	Tyr	Leu 420	Gly	Gly	Thr	Asp	Asp 425	Thr	Val	Lys	Lys	Lys 430	_	Leu
Phe	Leu	Asp 435	Leu	Ile	Ala	Asp	Val 440	Met	Phe	Gly	Val	Pro 445		Val	Ile
Val	Ala 450	Arg	Asn	His	Arg	Asp 455	Ala	Gly	Ala	Pro	Thr 460	Tyr	Met	Tyr	Glu
Phe 165	Gln	Tyr	Arg	Pro	Ser 470	Phe	Ser	Ser	Asp	Met 475	Lys	Pro	Lys	Thr	Val 480
île	Gly	Asp	His	Gly 485	Asp	Glu	Leu	Phe	Ser 490	Val	Phe	Gly	Ala	Pro 495	Phe
Leu	Lys	Glu	Gly 500	Ala	Ser	Glu	Glu	Glu 505	Ile	Arg	Leu	Ser	Lys 510	Met	Val
let	Lys	Phe 515	Trp	Ala	Asn	Phe	Ala 520	Arg	Asn	Gly	Asn	Pro 525	Asn	Gly	Glu
Sly	Leu 530	Pro	His	Trp	Pro	Glu 535	Tyr	Asn	Gln	Lys	Glu 540	Gly	Tyr	Leu	Gln
le 45	Gly	Ala	Asn	Thr	Gln	Ala	Ala	Gln	Lys	Leu	Lys	Asp	Lys	Glu	Val

Ala Phe Trp Thr Asn Leu Phe Ala Lys Lys Ala Val Glu Lys Pro Pro 565 570 575

Gln Thr Glu His Ile Glu Leu 580

<210> 1178

<211> 98

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (4)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1178

Pro Gly Arg Xaa Gln Leu Arg Ala Lys Phe Ser Cys Pro Pro Ala Asp 1 5 10 15

Arg Val Asn Val Thr Val Arg Pro Gly Leu Ala Met Ala Leu Ser Gly 20 25 30

Ser Thr Glu Pro Cys Ala Gln Leu Ser Ile Ser Ser Ile Gly Val Val 35 40 45

Gly Thr Ala Glu Asp Asn Arg Ser His Ser Ala His Phe Phe Glu Phe 50 55 60

Leu Thr Lys Glu Leu Ala Leu Gly Gln Asp Arg Ile Leu Ile Arg Phe 65 70 75 80

Phe Pro Leu Glu Ser Trp Gln Ile Gly Lys Ile Gly Thr Val Met Thr 85 90 95

Phe Leu

<210> 1179

<211> 127

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1180

<220> <221> SITE <222> (50) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (67) <223> Xaa equals any of the naturally occurring L-amino acids Phe Arg Pro Ala Val Ser Xaa Gly Ser Leu Cys Leu Pro Ala Arg Thr Ala His Ser Pro Ala Ser Ser Ala Ala Cys Arg Thr Met Ala Gln Gly 25 Gln Arg Lys Phe Gln Ala His Lys Pro Ala Lys Ser Lys Thr Ala Ala 40 Ala Kaa Ser Glu Lys Asn Arg Gly Pro Arg Lys Gly Gly Arg Val Ile 55 Ala Pro Xaa Lys Ala Arg Val Val Gln Gln Lys Leu Lys Lys Asn 70 75 Leu Glu Val Gly Ile Arg Lys Ile Glu His Asp Val Val Met Lys Ala Ser Ser Ser Leu Pro Lys Lys Leu Ala Leu Leu Lys Ala Pro Ala Lys Lys Lys Gly Ala Ala Ala Ala Thr Ser Ser Lys Thr Pro Ser 120 <210> 1180 <211> 94 <212> PRT <213> Homo sapiens

Arg Glu Arg Val Cys Val Ser Val Arg Val Ser Val Cys Ala Arg Ala
20
25
30

Arg Ser Trp Pro Asn Val Arg Thr Leu His Lys Gly Gly Arg Ser Ser

Ser Ser Tyr Arg Ser Lys Ala Tyr Thr His Thr Lys Ile Thr Val Pro

1196

40 45 35 Tyr Arg Leu Phe Asn Val Arg Glu Thr Ile Phe Leu Leu Phe Gln Leu Tyr Gln Ile Leu Val Pro Gln His Arg Asn Asp Ser Glu Ser Gln Thr Lys Cys Ile Ile Cys Ser Ile Leu Ile Leu Leu His Ser <210> 1181 <211> 353 <212> PRT <213> Homo sapiens <400> 1181 Gly Ser Leu Asp Leu Trp Arg Gly Ala Glu Leu Ser Pro Gly His Ser Thr Leu Phe Thr Leu Cys Ala Cys Ala Lys Gly Ala Met Ala Ala Ser Cys Val Leu Leu His Thr Gly Gln Lys Met Pro Leu Ile Gly Leu Gly Thr Trp Lys Ser Glu Pro Gly Gln Val Lys Ala Ala Val Lys Tyr Ala Leu Ser Val Gly Tyr Arg His Ile Asp Cys Ala Ala Ile Tyr Gly Asn Glu Pro Glu Ile Gly Glu Ala Leu Lys Glu Asp Val Gly Pro Gly Lys Ala Val Pro Arg Glu Glu Leu Phe Val Thr Ser Lys Leu Trp Asn Thr 105 Lys His His Pro Glu Asp Val Glu Pro Ala Leu Arg Lys Thr Leu Ala Asp Leu Gln Leu Glu Tyr Leu Asp Leu Tyr Leu Met His Trp Pro Tyr 135 Ala Phe Glu Arg Gly Asp Asn Pro Phe Pro Lys Asn Ala Asp Gly Thr

150

165

Ile Cys Tyr Asp Ser Thr His Tyr Lys Glu Thr Trp Lys Ala Leu Glu

155

1197

Ala Leu Val Ala Lys Gly Leu Val Gln Ala Leu Gly Leu Ser Asn Phe 180 185 190

Asn Ser Arg Gln Ile Asp Asp Ile Leu Ser Val Ala Ser Val Arg Pro 195 200 205

Ala Val Leu Gln Val Glu Cys His Pro Tyr Leu Ala Gln Asn Glu Leu 210 215 220

Ile Ala His Cys Gln Ala Arg Gly Leu Glu Val Thr Ala Tyr Ser Pro 225 230 230 235 240

Leu Gly Ser Ser Asp Arg Ala Trp Arg Asp Pro Asp Glu Pro Val Leu 245 250 255

Leu Glu Glu Pro Val Val Leu Ala Leu Ala Glu Lys Tyr Gly Arg Ser 260 265 270

Pro Ala Gln Ile Leu Leu Arg Trp Gln Val Gln Arg Lys Val Ile Cys 275 280 285

Ile Pro Lys Ser Ile Thr Pro Ser Arg Ile Leu Gln Asn Ile Lys Val 290 295 300

Phe Asp Phe Thr Phe Ser Pro Glu Glu Met Lys Gln Leu Asn Ala Leu 305 310 315 320

Asn Lys Asn Trp Arg Tyr Ile Val Pro Met Leu Thr Val Asp Gly Lys

Arg Val Pro Arg Asp Ala Gly His Pro Leu Tyr Pro Phe Asn Asp Pro 340 345 350

Tyr

<210> 1182

<211> 174

<212> PRT

<213> Homo sapiens

<400> 1182

Ala Arg Asp Ser Leu Gln Leu Ser Met Ala Gln Thr Ser Ser Tyr Phe
1 5 10 15

Met Leu Ile Ser Cys Leu Met Phe Leu Ser Gln Ser Gln Gly Gln Glu · 20 25 30

Ala Gln Thr Glu Leu Pro Gln Ala Arg Ile Ser Cys Pro Glu Gly Thr $35 \hspace{1cm} 40 \hspace{1cm} 45$

Asn Ala Tyr Arg Ser Tyr Cys Tyr Tyr Phe Asn Glu Asp Arg Glu Thr 50 55 60

Trp Val Asp Ala Asp Leu Tyr Cys Gln Asn Met Asn Ser Gly Asn Leu 65 70 75 80

Val Ser Val Leu Thr Gln Ala Glu Gly Ala Phe Val Ala Ser Leu Ile 85 90 95

Lys Glu Ser Gly Thr Asp Asp Phe Asn Val Trp Ile Gly Leu His Asp . 100 $$ 105 $$ 110

Pro Lys Lys Asn Arg Arg Trp His Trp Ser Ser Gly Ser Leu Val Ser 115 120 125

Tyr Lys Ser Trp Gly Ile Gly Ala Pro Ser Ser Val Asn Pro Gly Tyr 130 135 140

Cys Val Ser Leu Thr Ser Ser Thr Gly Phe Gln Lys Trp Lys Asp Val 145 150 155 160

Pro Cys Glu Asp Lys Phe Ser Phe Val Cys Lys Phe Lys Asn 165 170

<210> 1183

<211> 342

<212> PRT

<213> Homo sapiens

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<222> (169)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

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<220>

<221> SITE

<222> (187)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

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<22	0>														
<22	1> 8	ITE													
	2> (
		,		s an	y of	the	nat	ural	ly c	ccur	ring	L-a	mino	aci	ds
	0> 1			_			-	01						•	.
ser 1		Pne	ser	Tyr 5		Arg	Leu	GIU	10		ser	met	Trp	15	Leu
Val	Ser	Val	. Ile 20		Ile	Ser	Arg	Ile 25		Ser	Val	Gly	Gly 30	Glu	Ala
Thr	Phe	Cys 35	-	Phe	Pro	Lys	Ile 40		His	Gly	Ile	Leu 45	_	Asp	Glu
Glu	Lys 50	-	Lys	Pro	Phe	Ser 55		Val	Pro	Thr	Gly 60	Glu	Val	Phe	Tyr
Tyr 65		Cys	Glu	Tyr	Asn 70	Phe	Val	Ser	Pro	Ser 75	Lys	Ser	Phe	Trp	Thr 80
Arg	Ile	Thr	Cys	Thr 85	Glu	Glu	Gly	Trp	Ser 90	Pro	Thr	Pro	Lys	Cys 95	Leu
Arg	Leu	Cys	Phe 100		Pro	Phe	Val	Glu 105	Asn	Gly	His	Ser	Glu 110	Ser	Ser
Gly	Gln	Thr 115		Leu	Glu	Gly	Asp 120		Val	Gln	Ile	Ile 125	Cys	Asn	Thr
Gly	Tyr 130	Arg	Leu	Gln	Asn	Asn 135	Glu	Asn	Asn	Ile	Ser 140	Cys	Val	Glu	Arg
Gly 145	Trp	Ser	Thr	Pro	Pro 150	Lys	Cys	Arg	Ser	Thr 155	Asp	Thr	Ser	Cys	Val 160
Asn	Pro	Pro	Thr	Val 165	Gln	Asn	Ala	Xaa	Ile 170	Xaa	Ser	Arg	Gln	Met 175	Ser
Lys	Tyr	Pro	Ser 180	Gly	Glu	Arg	Val	Arg 185	Tyr	Xaa	Cys	Arg	Ser 190	Pro	Tyr
Glu	Met	Phe 195	Gly	Asp	Glu	Glu	Val 200	Met	Cys	Leu	Asn	Gly 205	Asn	Trp	Thr
Glu	Pro		Gln	Cys		Asp		Thr	Gly	Lys	Cys	Gly	Pro	Pro	Pro

1200

Pro Ile Asp Asn Gly Asp Ile Thr Ser Phe Pro Leu Ser Val Tyr Ala 230 225 235 Pro Ala Ser Ser Val Glu Tyr Gln Cys Gln Asn Leu Tyr Gln Leu Glu 250 Gly Asn Lys Arg Ile Thr Cys Arg Asn Gly Gln Trp Ser Glu Pro Pro 265 Lys Cys Leu His Pro Cys Val Ile Ser Arg Glu Ile Met Glu Asn Tyr 280 Asn Ile Ala Leu Arg Trp Thr Ala Lys Gln Lys Leu Tyr Xaa Arg Thr Gly Glu Ser Xaa Glu Phe Val Cys Lys Arg Gly Tyr Arg Leu Ser Ser 310 315 Arg Ser His Thr Leu Arg Thr Thr Cys Trp Asp Gly Lys Leu Glu Tyr 325 330 Pro Thr Cys Ala Lys Arg 340 <210> 1184 <211> 198 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (2) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (161) <223> Xaa equals any of the naturally occurring L-amino acids Pro Xaa Arg Pro Arg Gly Ala Ala Ala Ala Ala Ala Ala Gly Ala Ala Met Pro Lys Gly Gly Arg Lys Gly Gly His Lys Gly Arg Ala Arg

25

Gln Tyr Thr Ser Pro Glu Glu Ile Asp Ala Gln Leu Gln Ala Glu Lys

40

Gln Lys Ala Arg Glu Glu Glu Glu Gln Lys Glu Gly Gly Asp Gly Ala 50 55 60

Ala Gly Asp Pro Lys Lys Glu Lys Lys Ser Leu Asp Ser Asp Glu Ser 65 70 75 80

Glu Asp Glu Glu Asp Asp Tyr Gln Gln Lys Arg Lys Gly Val Glu Gly 85 90 95

Leu Ile Asp Ile Glu Asn Pro Asn Arg Val Ala Gln Thr Thr Lys Lys 100 105 110

Val Thr Gln Leu Asp Leu Asp Gly Pro Lys Glu Leu Ser Arg Arg Glu 115 120 125

Arg Glu Glu Ile Glu Lys Gln Lys Ala Lys Glu Arg Tyr Met Lys Met 130 135 140

His Leu Ala Gly Lys Thr Glu Gln Ala Lys Ala Asp Leu Ala Arg Leu 145 150 155 160

Xaa Ile Ile Arg Lys Gln Arg Glu Glu Ala Ala Arg Lys Lys Glu Glu 165 170 175

Glu Arg Lys Ala Lys Asp Asp Ala Thr Leu Ser Gly Lys Arg Met Gln 180 185 190

Ser Leu Ser Leu Asn Lys 195

<210> 1185

<211> 210

<212> PRT

<213> Homo sapiens

<400> 1185

Ala His Ala Ser Ala His Ala Ser Gly Met Asp Leu Ser Leu Leu Trp 1 5 10 15

Val Leu Leu Pro Leu Val Thr Met Ala Trp Gly Gln Tyr Gly Asp Tyr
20 25 30

Gly Tyr Pro Tyr Gln Gln Tyr His Asp Tyr Ser Asp Asp Gly Trp Val 35 40 45

Asn Leu Asn Arg Gln Gly Phe Ser Tyr Gln Cys Pro Gln Gly Gln Val 50 55 60

Ile Val Ala Val Arg Ser Ile Phe Ser Lys Lys Glu Gly Ser Asp Arg

1202

70 75 65 80 Gln Trp Asn Tyr Ala Cys Met Pro Thr Pro Gln Ser Leu Gly Glu Pro 85 90 Thr Glu Cys Trp Trp Glu Glu Ile Asn Arg Ala Gly Met Glu Trp Tyr 105 Gln Thr Cys Ser Asn Asn Gly Leu Val Ala Gly Phe Gln Ser Arg Tyr Phe Glu Ser Val Leu Asp Arg Glu Trp Gln Phe Tyr Cys Cys Arg Tyr Ser Lys Arg Cys Pro Tyr Ser Cys Trp Leu Thr Thr Glu Tyr Pro Gly 150 155 His Tyr Gly Glu Glu Met Asp Met Ile Ser Tyr Asn Tyr Asp Tyr Tyr 170 Ile Arg Gly Ala Thr Thr Phe Ser Ala Val Glu Arg Asp Arg Gln 185 Trp Lys Phe Ile Met Cys Arg Met Thr Glu Tyr Asp Cys Glu Phe Ala 200 Asn Val 210 <210> 1186 <211> 141 <212> PRT <213> Homo sapiens <400> 1186 Arg Ala Ile Tyr Phe Leu Arg Val His Arg Leu Trp Ser Ser Ile Ser Leu Leu Phe Phe Pro Ser Ala Lys Met Ala Leu Glu Thr Val Pro Lys Asp Leu Arg His Leu Arg Ala Cys Leu Leu Cys Ser Leu Val Lys Thr 35 40 Ile Asp Gln Phe Glu Tyr Asp Gly Cys Asp Asn Cys Asp Ala Tyr Leu Gln Met Lys Gly Asn Arg Glu Met Val Tyr Asp Cys Thr Ser Ser Ser 75

1203

Phe Asp Gly Ile Ile Ala Met Met Ser Pro Glu Asp Ser Trp Val Ser Lys Trp Gln Arg Val Ser Asn Phe Lys Pro Gly Val Tyr Ala Val Ser 105 Val Thr Gly Arg Leu Pro Gln Gly Ile Val Arg Glu Leu Lys Ser Arg 120 Gly Val Ala Tyr Lys Ser Arg Asp Thr Ala Ile Lys Thr 130 135 <210> 1187 <211> 76 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (42) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (66) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (74) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1187 Leu Leu Gly Ser Cys Leu Gln Glu Ala Met Thr Leu Asn Ser Glu Pro Tyr Ser Val Leu Thr Ser Gly Ser His Val Phe Leu Cys Gln Val Ile 25 Lys Tyr Leu Val Leu Val Phe Cys Leu Xaa Pro Lys Leu Pro Leu Trp 40 Val His Arg Arg Leu Gly Ser Ile Val Arg Met Ala Ile Arg Glu Tyr 50 55 Lys Xaa Gly Phe Ser Lys Gly Leu Gly Xaa Asp Ser

65

<210> 1188

<211> 516

<212> PRT

<213> Homo sapiens

<400> 1188

Ile Arg Ile Ala Ala Leu Asp Asp Phe Arg Thr Ser Leu Thr Met Ser 1 5 10 15

Ser Thr Arg Ser Gln Asn Pro His Gly Leu Lys Gln Ile Gly Leu Asp 20 25 30

Gln Ile Trp Asp Asp Leu Arg Ala Gly Ile Gln Gln Val Tyr Thr Arg $35 \hspace{1cm} 40 \hspace{1cm} 45$

Gln Ser Met Ala Lys Ser Arg Tyr Met Glu Leu Tyr Thr His Val Tyr 50 55 60

Asn Tyr Cys Thr Ser Val His Gln Ser Asn Gln Ala Arg Gly Ala Gly 65 70 75 80

Val Pro Pro Ser Lys Ser Lys Gly Gln Thr Pro Gly Gly Ala Gln 85 90 95

Phe Val Gly Leu Glu Leu Tyr Lys Arg Leu Lys Glu Phe Leu Lys Asn 100 105 110

Tyr Leu Thr Asn Leu Leu Lys Asp Gly Glu Asp Leu Met Asp Glu Ser 115 120 125

Val Leu Lys Phe Tyr Thr Gln Gln Trp Glu Asp Tyr Arg Phe Ser Ser 130 135 140

Lys Val Leu Asn Gly Ile Cys Ala Tyr Leu Asn Arg His Trp Val Arg 145 150 155 160

Arg Glu Cys Asp Glu Gly Arg Lys Gly Ile Tyr Glu Ile Tyr Ser Leu 165 170 175

Ala Leu Val Thr Trp Arg Asp Cys Leu Phe Arg Pro Leu Asn Lys Gln 180 185 190

Val Thr Asn Ala Val Leu Lys Leu Ile Glu Lys Glu Arg Asn Gly Glu
195 200 205

Thr Ile Asn Thr Arg Leu Ile Ser Gly Val Val Gln Ser Tyr Val Glu 210 215 220

Leu Gly Leu Asn Glu Asp Asp Ala Phe Ala Lys Gly Pro Thr Leu Thr

22	5				230)				235	5				240
Val	l Ty	Ly:	s Glu	1 Sei 24!		e Glu	ı Ser	: Glr	250		ı Ala	a Asį	Thi	Glu 255	-
Phe	∋ Туг	Thi	260		ı Ser	Thi	r Glu	265		ı Glr	n Glr	n Asr	270		Thr
Glu	а Туі	275	_	5 Lys	a Ala	. Glı	1 Ala 280	-	, Le	ı Lev	g Glu	Glu 285		Arg	, Arg
Va]	1 Glr 290		1 Туг	Let	ı His	Glu 295	ser	Thr	Glr	n Asp	300		a Ala	Arg	Lys
Cys 305		Glr	n Val	. Leu	Ile 310		Lys	His	Leu	315		Phe	His	Thr	Glu 320
Phe	Glr	Asr	l Leu	325	_	Ala	. Asp	Lys	330		Asp	Leu	Gly	Arg 335	
Tyr	Asn	Leu	Val 340		Arg	Ile	Gln	Asp 345	_	Leu	Gly	Glu	350		Lys
Leu	Leu	355		His	Ile	His	Asn 360	Gln	Gly	Leu	Ala	Ala 365		Glu	Lys
Cys	Gly 370		Ala	Ala	Leu	Asn 375	Asp	Pro	Lys	Met	Туг 380		Gln	Thr	Val
Leu 385		Val	His	Lys	Lys 390	Tyr	Asn	Ala	Leu	Val 395	Met	Ser	Ala	Phe	Asn 400
Asn	Asp	Ala	Gly	Phe 405	Val	Ala	Ala	Leu	Asp 410	Lys	Ala	Cys	Gly	Arg 415	Phe
Ile	Asn	Asn	Asn 420	Ala	Val	Thr	Lys	Met 425	Ala	Gln	Ser	Ser	Ser 430	Lys	Ser
Pro	Glu	Leu 435	Leu	Ala	Arg	Tyr	Cys 440	Asp	Ser	Leu	Leu	Lys 445	Lys	Ser	Ser
Lys	Asn 450	Pro	Glu	Glu	Ala	G1u 455	Leu	Glu	Asp	Thr	Leu 460	Asn	Gln	Val	Met
Val 465	Val	Phe	Lys	Tyr	Ile 470	Glu	Asp	Lys	Asp	Val 475	Phe	Gln	Lys	Phe	Tyr 480
Ala	Lys	Met	Leu	Ala 485	Lys	Arg	Leu	Val	His 490	Gln	Asn	Ser	Ala	Ser 495	Asp
Asp	Ala	Glu	Ala	Ser	Met	Ile	Ser	Lys	Leu	Lys	Gln	Ala	Cys	Gly	Phe

500 505 510 Glu Tyr Thr Ser 515 <210> 1189 <211> 287 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (20) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (24) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (27) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (55) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (172) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (254) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (271) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (274) <223> Xaa equals any of the naturally occurring L-amino acids

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<pre><221> SITE</pre>	<22	?3> }	(aa e	equal	s an	y of	the	nat	ural	.1y c	occur	ring	L-a	mino	aci	ds
<pre><221> SITE</pre>																
<222> (280) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1189 Met Ser Tyr Cys Asp Glu Ser Arg Leu Ser Asn Leu Leu Arg Arg Ile 1	<22	20>														
<pre><223> Xaa equals any of the naturally occurring L-amino acids <400> 1189 Met Ser Tyr Cys Asp Glu Ser Arg Leu Ser Asn Leu Leu Arg Arg Ile 1</pre>	<22	:1> 5	ITE													
<pre><223> Xaa equals any of the naturally occurring L-amino acids <400> 1189 Met Ser Tyr Cys Asp Glu Ser Arg Leu Ser Asn Leu Leu Arg Arg Ile 1</pre>	<22	2> (280)													
<400> 1189 Met Ser Tyr Cys Asp Glu Ser Arg Leu Ser Asn Leu Leu Arg Arg Ile 1 5 10 15 15 Thr Arg Glu Xaa Asp Arg Asp Asp Glu Ser Asp Leu Xaa Thr Val Lys Gln Leu 20 25 25 25 26 <td< td=""><td></td><td></td><td>•</td><td></td><td>s an</td><td>v of</td><td>the</td><td>nat</td><td>ural</td><td>lv c</td><td>ccur</td><td>rina</td><td>L-a</td><td>mino</td><td>aci</td><td>ds</td></td<>			•		s an	v of	the	nat	ural	lv c	ccur	rina	L-a	mino	aci	ds
Met Ser Tyr Cys Asp Glu Ser Arg Leu Ser Asn Leu Leu Arg Arg Alg Asp Yaa Arg Leu Yaa Arg Leu Yaa Arg Leu Yaa Arg Cu Yaa Arg Ala Ala Asp Yaa Arg Leu Val Leu Val Lys Glu Leu Val Leu Val Lys Glu Asp Leu Val Leu Val Lys Glu Asp Val Leu Asp Glu Asp Val Leu Asp Glu Asp Asp Asp Cys Leu Cys Cys Leu Leu Leu Leu Leu Asp Asp Glu Leu Leu Asp Asp Asp Hu Leu Asp Asp Asp Hu Leu Asp Asp Asp Asp Hu				1		1										
Met Ser Tyr Cys Asp Glu Ser Arg Leu Ser Asn Leu Leu Arg Arg Alg Asp Yaa Arg Leu Yaa Arg Leu Yaa Arg Leu Yaa Arg Cu Yaa Arg Ala Ala Asp Yaa Arg Leu Val Leu Val Lys Glu Leu Val Leu Val Lys Glu Asp Leu Val Leu Val Lys Glu Asp Val Leu Asp Glu Asp Val Leu Asp Glu Asp Asp Asp Cys Leu Cys Cys Leu Leu Leu Leu Leu Asp Asp Glu Leu Leu Asp Asp Asp Hu Leu Asp Asp Asp Hu Leu Asp Asp Asp Asp Hu	<40	0> 1	189													
Thr Arg Glu Xaa Asp Arg Asp Xaa Arg Leu Xaa Thr Val Lys Gln Leu 20				· Cva) Acn	Glu	Cor	72	T.O.	Sar	· Acr	Lou	T.OII	Δra	Ara	Tla
Thr Arg Glu Xaa Asp Arg Asp Xaa Arg Leu Xaa Thr Val Lys Gln Leu 25				. Cys	_		061	Arg	рес			пец	пеа	. Arg	_	
Lys Glu Phe Ile Gln Gln Pro Glu Asn Lys Leu Val Leu Val Lys Gln 35	•	•			,					10	,				1,	
Lys Glu Phe Ile Gln Gln Pro Glu Asn Lys Leu Val Leu Val Lys Gln 35	mb.	. 7			*	7	.		*	*		m1	*** 1	.	41.	
Lys Glu Phe Ile Gln Gln Pro Glu Asn Lys Leu Val Leu Val Lys Gln Asp Ile Leu Ala Ala Xaa His Asp Val Leu Asn Glu Ser Ser Lys 50	THE	Arg	GIU		-	Arg	Asp	хаа	_		каа	Thr	val	-		Leu
Leu Asp Ile Leu Ala Ala Xaa His Asp Val Leu Asn Glu Ser Ser Lys 50				20					25					30		
Leu Asp Ile Leu Ala Ala Xaa His Asp Val Leu Asn Glu Ser Ser Lys 50	_											_				
Leu Asp Ile Leu Ala Ala Xaa His Asp Val Leu Asn Glu Ser Ser Lys 50	Lys	Glu			Gln	Gln	Pro			Lys	Leu	Val			Lys	Gln
Leu Leu Gln Glu Leu Arg Gln Glu Glu Leu Arg Gln Glu Glu Lys Cys Leu Gly Leu Leu 80 Cys Ala Ser Leu Ser Tyr Glu Ala Glu Lys Ile Phe Lys Trp Ile Phe 95 Ser Lys Phe Ser Ser Ser Ala Lys Asp Glu Val Lys Leu Leu Tyr Leu 110 Cys Ala Thr Tyr Lys Ala Leu Glu Thr Val Gly Glu Lys Lys Lys Ala Phe 115			35					40					45			
Leu Leu Gln Glu Leu Arg Gln Glu Glu Leu Arg Gln Glu Glu Lys Cys Leu Gly Leu Leu 80 Cys Ala Ser Leu Ser Tyr Glu Ala Glu Lys Ile Phe Lys Trp Ile Phe 95 Ser Lys Phe Ser Ser Ser Ala Lys Asp Glu Val Lys Leu Leu Tyr Leu 110 Cys Ala Thr Tyr Lys Ala Leu Glu Thr Val Gly Glu Lys Lys Lys Ala Phe 115																
Leu Leu Gln Glu Leu Arg Gln Glu Glu Leu Arg Gln Glu Gly Ala Cys Cys Leu Gly Leu Leu 80 Cys Ala Ser Leu Ser Tyr Glu Ala Glu Lys Ile Phe Lys Trp Ile Phe 95 Ser Lys Phe Ser Ser Ser Ala Lys Asp Glu Val Lys Leu Leu Tyr Leu 100 Cys Ala Thr Tyr Lys Ala Leu Glu Thr Val Gly Glu Lys Lys Lys Ala Phe 115 Ser Ser Val Met Gln Leu Val Met Thr Ser Leu Gln Ser Ile Leu Glu 130 Asn Val Asp Thr Pro Glu Leu Leu Cys Lys Cys Val Lys Cys Ile Leu 145 Leu Val Ala Arg Cys Tyr Pro His Ile Phe Ser Xaa Asn Phe Arg Asp 165 Thr Val Asp Ile Leu Val Gly Trp His Arg Asp His Thr Gln Lys Pro 186 Ser Leu Thr Gln Gln Val Ser Gly Trp Leu Gln Ser Leu Glu Pro Phe	Leu	Asp	Ile	Leu	Ala	Ala	Xaa	His	Asp	Val	Leu	Asn	Glu	Ser	Ser	Lys
65 70 75 80 Cys Ala Ser Leu Ser Tyr Glu Ala Glu Lys Tle Phe Lys Trp Ile Phe 95 Phe 100 Phe 100 Phe 100 Phe 100 Phe 110		50					55					60				
65 70 75 80 Cys Ala Ser Leu Ser Tyr Glu Ala Glu Lys Tle Phe Lys Trp Ile Phe 95 Phe 100 Phe 100 Phe 100 Phe 100 Phe 110																
65 70 75 80 Cys Ala Ser Leu Ser Tyr Glu Ala Glu Lys Tle Phe Lys Trp Ile Phe 95 Phe 100 Phe 100 Phe 100 Phe 100 Phe 110	Leu	Leu	Gln	Glu	Leu	Arg	Gln	Glu	Gly	Ala	Cys	Cys	Leu	Gly	Leu	Leu
Ser Lys Phe Ser Ser Ser Ala Lys Asp Glu Val Lys Leu Tyr Leu Cys Ala Thr Tyr Lys Ala Leu Glu Thr Val Glu Lys Lys Ala Phe Ser Ser Val Met Gln Leu Val Met Thr Ser Leu Gln Ser Leu Gln Ser Leu Gln Ser Leu Gln Leu Gln Leu Leu Lys Cys Lys Cys Ile Leu Gln Leu Leu Lys Cys Lys Cys Ile Leu Ile Ile Ile Leu Ile Ile Ile									_			_		_		
Ser Lys Phe Ser Ser Ser Ala Lys Asp Glu Val Lys Leu Tyr Leu Cys Ala Thr Tyr Lys Ala Leu Glu Thr Val Glu Lys Lys Ala Phe Ser Ser Val Met Gln Leu Val Met Thr Ser Leu Gln Ser Leu Gln Ser Leu Gln Ser Leu Gln Leu Gln Leu Leu Lys Cys Lys Cys Ile Leu Gln Leu Leu Lys Cys Lys Cys Ile Leu Ile Ile Ile Leu Ile Ile Ile																
Ser Lys Phe Ser Ser Ser Ala Lys Asp Glu Val Lys Leu Tyr Leu Cys Ala Thr Tyr Lys Ala Leu Glu Thr Val Glu Lys Lys Ala Phe Ser Ser Val Met Gln Leu Val Met Thr Ser Leu Gln Ser Leu Gln Ser Leu Gln Ser Leu Gln Leu Gln Leu Leu Lys Cys Lys Cys Ile Leu Gln Leu Leu Lys Cys Lys Cys Ile Leu Ile Ile Ile Leu Ile Ile Ile	Cys	Ala	Ser	Leu	Ser	Tyr	Glu	Ala	Glu	Lvs	Ile	Phe	Lvs	Trp	Ile	Phe
Ser Lys Phe Ser Ser Ser Ala Lys Asp Glu Val Lys Leu Leu Tyr Leu 100 Cys Ala Thr Tyr Lys Ala Leu Glu Thr Val Gly Glu Lys Lys Ala Phe 115 Ser Ser Val Met Gln Leu Val Met Thr Ser Leu Gln Ser Ile Leu Glu 130 Asn Val Asp Thr Pro Glu Leu Leu Cys Lys Cys Val Lys Cys Ile Leu 160 Leu Val Ala Arg Cys Tyr Pro His Ile Phe Ser Xaa Asn Phe Arg Asp 165 Thr Val Asp Ile Leu Val Gly Trp His Arg Asp His Thr Gln Lys Pro 180 Ser Leu Thr Gln Gln Val Ser Gly Trp Leu Gln Ser Leu Glu Pro Phe	-					-			-	_		-	-	•		_
Cys Ala Thr Tyr Lys Ala Leu Glu Thr Val Gly Glu Lys Lys Ala Phe 115																
Cys Ala Thr Tyr Lys Ala Leu Glu Thr Val Gly Glu Lys Lys Ala Phe 115	Ser	T.vs	Phe	Ser	Ser	Ser	Δla	Lve	Agn	Glu	Wa 1	T.vs	T.e.11	I.e.ii	Ф177	T.011
Cys Ala Thr Tyr Lys Ala Leu Glu Thr Val Gly Glu Lys Lys Ala Phe 115 Ser Ser Val Met Gln Leu Val Met Thr Ser Leu Gln Ser Ile Leu Glu 130 Asn Val Asp Thr Pro Glu Leu Leu Cys Lys Cys Val Lys Cys Ile Leu 160 Leu Val Ala Arg Cys Tyr Pro His Ile Phe Ser Xaa Asn Phe Arg Asp 165 Thr Val Asp Ile Leu Val Gly Trp His Arg Asp His Thr Gln Lys Pro 180 Ser Leu Thr Gln Gln Val Ser Gly Trp Leu Gln Ser Leu Glu Pro Phe		2,2			DCI	DCI	nia	шур	_	GIU	VAI	цуз	шси		- y -	Deu
Ser Ser Val Met Gln Leu Val Met Thr Ser Leu Gln Ser Ile Leu Glu				100					103					110		
Ser Ser Val Met Gln Leu Val Met Thr Ser Leu Gln Ser Ile Leu Glu	Cura	71.	mh w	m	T	21-	T	~1	ml	**- 7	a 1	~7	T	T		5 1
Ser Ser Val Met Gln Leu Val Met Thr Ser Leu Gln Ser Ile Leu Glu 130 Val Asp Thr Pro Glu Leu Leu Cys Lys Cys Val Lys Cys Ile Leu 160 Leu Val Ala Arg Cys Tyr Pro His Ile Phe Ser Xaa Asn Phe Arg Asp 175 Thr Val Asp Ile Leu Val Gly Trp His Arg Asp His Thr Gln Lys Pro 180 Ser Leu Thr Gln Gln Val Ser Gly Trp Leu Gln Ser Leu Glu Pro Phe	Cys	VIG		TYL	пув	MIG	Ten		THE	val	GIY	GIU	_	гаг	Ата	Pue
Asn Val Asp Thr Pro Glu Leu Leu Cys Lys Cys Val Lys Cys Lys Cys Leu 160 Leu Val Ala Arg Cys Tyr Pro His Ile Phe Ser Xaa Asn Phe Arg Asp 165 Thr Val Asp Ile Leu Val Gly Trp His Arg Asp His Thr Gln Lys Pro 185 Ser Leu Thr Gln Gln Val Ser Gly Trp Leu Gln Ser Leu Glu Pro Phe			112					120					125			
Asn Val Asp Thr Pro Glu Leu Leu Cys Lys Cys Val Lys Cys Lys Cys Leu 160 Leu Val Ala Arg Cys Tyr Pro His Ile Phe Ser Xaa Asn Phe Arg Asp 165 Thr Val Asp Ile Leu Val Gly Trp His Arg Asp His Thr Gln Lys Pro 185 Ser Leu Thr Gln Gln Val Ser Gly Trp Leu Gln Ser Leu Glu Pro Phe	_	_			_		_						_			_
Asn Val Asp Thr Pro Glu Leu Leu Cys Lys Cys Val Lys Cys Ile Leu 145 Leu Val Ala Arg Cys Tyr Pro His Ile Phe Ser Xaa Asn Phe Arg Asp 165 Thr Val Asp Ile Leu Val Gly Trp His Arg Asp His Thr Gln Lys Pro 180 Ser Leu Thr Gln Gln Val Ser Gly Trp Leu Gln Ser Leu Glu Pro Phe	ser		Val	Met	Gln	Leu		Met	Thr	Ser	Leu		Ser	Ile	Leu	Glu
145 150 155 160 Leu Val Ala Arg Cys 165 Tyr Pro His 11e Phe Ser Xaa Asn Phe Arg Asp 165 170 175 Thr Val Asp 11e Leu 180 Val Gly Trp 185 Arg Asp His Thr Gln Lys Pro 185 Pro 190 Ser Leu Thr Gln Gln Gln Val Ser Gly Trp Leu Gln Ser Leu Glu Pro Phe		130					135					140				
145 150 155 160 Leu Val Ala Arg Cys 165 Tyr Pro His 11e Phe Ser Xaa Asn Phe Arg Asp 165 170 175 Thr Val Asp 11e Leu 180 Val Gly Trp 185 Arg Asp His Thr Gln Lys Pro 185 Pro 190 Ser Leu Thr Gln Gln Gln Val Ser Gly Trp Leu Gln Ser Leu Glu Pro Phe																
Leu Val Ala Arg Cys Tyr Pro His Ile Phe Ser Xaa Asn Phe Arg Asp 165 Thr Val Asp Ile Leu Val Gly Trp His Arg Asp His Thr Gln Lys Pro 180 Trp Leu Gln Ser Leu Glu Pro Phe	Asn	Val	Asp	Thr	Pro	Glu	Leu	Leu	Cys	Lys	Cys	Val	Lys	Cys	Ile	Leu
Thr Val Asp Ile Leu Val Gly Trp His Arg Asp His Thr Gln Lys Pro 180	145					150					155					160
Thr Val Asp Ile Leu Val Gly Trp His Arg Asp His Thr Gln Lys Pro 180																
Thr Val Asp Ile Leu Val Gly Trp His Arg Asp His Thr Gln Lys Pro 180	Leu	Val	Ala	Arg	Cys	Tyr	Pro	His	Ile	Phe	Ser	Xaa	Asn	Phe	Arg	Asp
180 185 190 Ser Leu Thr Gln Gln Val Ser Gly Trp Leu Gln Ser Leu Glu Pro Phe																
180 185 190 Ser Leu Thr Gln Gln Val Ser Gly Trp Leu Gln Ser Leu Glu Pro Phe																
180 185 190 Ser Leu Thr Gln Gln Val Ser Gly Trp Leu Gln Ser Leu Glu Pro Phe	Thr	Val	Asp	Ile	Leu	Val	Gly	Trp	His	Arg	Asp	His	Thr	Gln	Lys	Pro
Ser Leu Thr Gln Gln Val Ser Gly Trp Leu Gln Ser Leu Glu Pro Phe			_				-	•		,	•					-
	Ser	Leu	Thr	Gln	Gln	Val	Ser	Glv	Trp	Leu	Gln	Ser	Leu	Glu	Pro	Phe
195 200 205			195					200	. E				205		·	

Trp Val Ala Asp Leu Ala Phe Pro Thr Thr Leu Leu Gly Gln Phe Leu 210 215 220

Glu Asp Met Glu Ala Tyr Ala Glu Asp Leu Ser His Val Ala Ser Gly 225 230 235 240

Glu Ser Val Asp Glu Asp Val Pro Pro Pro Ser Val Ser Xaa Pro Lys
245 250 255

Leu Ala Ala Leu Leu Arg Val Phe Ser Thr Val Val Arg Ser Xaa Gly 260 265 270

Glu Xaa Xaa Ser Pro Ile Arg Xaa Leu Gln Leu Leu Arg His Thr \$275\$ \$280\$ \$285\$

<210> .1190

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<212> PRT

<213> Homo sapiens

<400> 1190

Arg Pro Pro Ser Arg Trp Ser Trp Trp Gln Gly Lys Pro Thr Gly Gly

1 5 10 15

Val Cys Val Ala Ala Arg Ser Ser Pro Ser Val Thr Ala Pro Thr 20 25 30

Ser Ser Asn Ala Leu Ala Tyr Leu His Ser Ser Ser Arg Pro Lys Arg 35 40 45

Pro Ala Trp Trp His Ser Val Pro Ala Arg Pro Leu Arg Gly Pro Arg 50 55 60

Thr Ala Met Ala Pro Thr Gly Val Ser Ala Cys Arg Arg Gln Lys Trp 65 70 75 80

Ala Pro His Ser Glu Gly Ala Ala Ala Val Gln Pro Gln Val Ala Leu 85 90 95

Ala Pro Gly Leu 100

<210> 1191

<211> 115

<212> PRT

<213> Homo sapiens

1209

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Lys Phe Asn Leu Arg Asp Lys Met Gln Trp Thr Ser Leu Leu Leu

40

AT	50		ı Pne	e Sel	. reo	55 55		1 ATS	i GII	туг	60	_) ASP		HIS
Tr _I	-	Phe	e His	ту1	Leu 70	_	g Ser	Glr	Glr	n Sei 75		Туг	Туг	Asp	Pro 80
Тут	. Ası	Pro	туг	Pro 85	-	- Glu	Thr	туг	Glu 90		Туг	Pro	Tyr	Gly 95	Val
Asp	Glu	a Gly	7 Pro		Tyr	Thr	Туг	Gly 105		Pro	Ser	Pro	Pro	_	Pro
Arg	l Yat	115		Gln	Glu	Cys	Asp 120	_	Pro	Pro) Asn	Phe 125		Thr	Ala
Met	130		Asp	Asn	Arg	Asn 135		Lys	Tyr	Leu	Pro 140		Val	Pro	Ser
Arg 145		Lys	туг	Val	Tyr 150		Gln	Asn	Asn	Gln 155		Thr	Ser	Ile	Gln 160
Glu	Gly	Val	. Phe	Asp 165		Ala	Thr	Gly	Leu 170		Trp	Ile	Ala	Leu 175	His
Gly	Asn	Gln	Ile 180		Ser	Asp	Lys	Val 185	_	Arg	Lys	Val	Phe 190	Ser	Lys
Leu	Arg	His 195	Leu	Glu	Arg	Leu	Tyr 200	Leu	Asp	His	Asn	Asn 205	Leu	Thr	Arg
Met	Pro 210	Gly	Pro	Leu	Pro	Arg 215	Ser	Leu	Arg	Glu	Leu 220	His	Leu	Asp	His
Asn 225	Gln	Ile	Ser	Arg	Val 230	Pro	Asn	Asn	Ala	Leu 235	Glu	Gly	Leu	Glu	Asn 240
Leu	Thr	Ala	Leu	Tyr 245	Leu	Gln	His	Asn	Glu 250	Ile	Gln	Glu	Val	Gly 255	Ser
Ser	Met	Arg	Gly 260	Leu	Arg	Ser	Leu	11e 265	Leu	Leu	Asp	Leu	Ser 270	Tyr	Asn
His	Leu	Arg 275	Lys	Val	Pro	Asp	Gly 280	Leu	Pro	Ser	Ala	Leu 285	Glu	Gln	Leu
Tyr	Met 290	Glu	His	Asn		Val 295	Tyr	Thr	Val	Pro	Asp 300	Ser	Tyr	Phe	Arg
Gly 305	Ala	Pro	Lys	Leu	Leu 310	Tyr	Val	Arg	Leu	Ser 315	His	Asn	Ser		Thr 320

1211

Asn Asn Gly Leu Ala Ser Asn Thr Phe Asn Ser Ser Ser Leu Leu Glu Leu Asp Leu Ser Tyr Asn Gln Leu Gln Lys Ile Pro Pro Val Asn Thr 345 Asn Leu Glu Asn Leu Tyr Leu Gln Gly Asn Arg Ile Asn Glu Phe Ser 360 Ile Ser Ser Phe Cys Thr Val Val Asp Val Val Asn Phe Ser Lys Leu 370 375 Gln Val Leu Arg Leu Asp Gly Asn Glu Ile Lys Arg Ser Ala Met Pro Ala Asp Ala Pro Leu Cys Leu Arg Leu Ala Ser Leu Ile Glu Ile 405 410 <210> 1193 <211> 620 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (375) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (501) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (532) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (546) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1193 Ser Ala Val Thr Ala Phe Ser Glu Gly Ser Val Ile Ala Tyr Tyr Trp 1 5 10 15

Ser Glu Phe Ser Ile Pro Gln His Leu Val Glu Glu Ala Glu Arg Val

			20)				25	ı				30)	
Met	: Ala	35		ı Arç	y Val	. Val	Met 40		Pro	Pro	Arg	Ala 45	•	g Ser	Leu
Lys	s Ser		val	. Val	L Thr	Ser 55		Val	Ala	. Phe	Pro 60		Asp	Ser	Lys
Thr 65		. Glr	Arg	Thr	Gln 70	-	Asn	Ser	Суѕ	Ser 75	Phe	Gly	Leu	His	Ala 80
Arg	Gly	Val	. Glu	Leu 85		Arg	Phe	Thr	Thr 90	Pro	Gly	Phe	Pro	Asp 95	
Pro	Tyr	Pro	Ala 100		Ala	Arg	Cys	Gln 105	Trp	Ala	Leu	Arg	Gly 110	_	Ala
Asp	Ser	Val 115		Ser	Leu	Thr	Phe 120	Arg	Ser	Phe	Asp	Leu 125	Ala	Ser	Cys
Asp	Glu 130		Gly	Ser	Asp	Leu 135	Val	Thr	Val	Tyr	Asn 140	Thr	Leu	Ser	Pro
Met 145		Pro	His	Ala	Leu 150	Val	Gln	Leu	Cys	Gly 155	Thr	Tyr	Pro	Pro	Ser 160
Tyr	Asn	Leu	Thr	Phe 165	His	Ser	Ser	Gln	Asn 170	Val	Leu	Leu	Ile	Thr 175	Leu
Ile	Thr	Asn	Thr 180	Glu	Arg	Arg	His	Pro 185	Gly	Phe	Glu	Ala	Thr 190	Phe	Phe
Gln	Leu	Pro 195	Arg	Met	Ser	Ser	Суs 200	Gly	Gly	Arg	Leu	Arg 205	Lys	Ala	Gln
Gly	Thr 210	Phe	Asn	Ser	Pro	Tyr 215	Tyr	Pro	Gly	His	Tyr 220	Pro	Pro	Asn	Ile
Asp 225	Cys	Thr	Trp	Asn	Ile 230	Glu	Va1	Pro	Asn	Asn 235	Gln	His	Val	Lys	Val 240
Arg	Phe	Lys	Phe	Phe 245	Tyr	Leu	Leu	Glu	Pro 250	Gly	Val	Pro	Ala	Gly 255	Thr
Cys	Pro	Lys	Asp 260	Туг	Val	Glu	Ile	Asn 265	Gly	Glu	Lys	Tyr	Cys 270	Gly	Glu
Arg	Ser	Gln 275	Phe	Val	Val	Thr	Ser 280	Asn	Ser	Asn		11e 285	Thr	Val	Arg
Phe	His	Ser	Asp	G1n	Ser	Tvr	Thr	Asp	Thr	Glv	Phe	Leu	Ala	Glu	ጥህተ

	290)				295	5				300)			
Leu 305		Туг	Asp	Ser	Ser 310		Pro	Суя	Pro	315) Phe	e Thi	Cys	320
Thr	Gly	Arg	ј Суз	325	e Arg	Lys	Glu	. Lei	330	-	. Asp	Gl _y	y Tr <u>i</u>	335	_
Cys	Thr	Asp) His		Asp	Glu	Leu	Asr 345	_	Ser	Сув	. Asp	350	_	His
Gln	Phe	355		Lys	Asn	Lys	Phe 360		. Lys	Pro	Leu	Phe 365		Val	. Суя
Asp	Ser 370		. Asn	Asp	Cys	Xaa 375		Asn	Ser	. Asb	380		Gly	Cys	Ser
Cys 385		Ala	. Gln	Thr	Phe 390	Arg	Cys	Ser	Asn	Gly 395		Cys	Leu	Ser	Lys 400
Ser	Gln	Gln	Суѕ	Asn 405	Gly	Lys	Asp	Asp	Cys 410	-	Asp	Gly	Ser	Asp 415	
Ala	Ser	Сув	Pro 420		Val	Asn	Val	Val 425		Суз	Thr	Lys	His 430		Туг
Arg	Cys	Leu 435		Gly	Leu	Сув	Leu 440	Ser	Lys	Gly	Asn	Pro		Cys	Asp
Gly	Lys 450		Asp	Cys	Ser	Asp 455	Gly	Ser	Asp	Glu	Lys 460	-	Cys	Asp	Суз
Gly 465	Leu	Arg	Ser	Phe	Thr 470	Arg	Gln	Ala	Arg	Val 475	Val	Gly	Gly	Thr	Asp 480
Ala	Asp	Glu	Gly	Glu 485	Trp	Pro	Trp	Gln	Val 490	Ser	Leu	His	Ala	Leu 495	Gly
31n	Gly	Thr	Ser 500	Xaa	Gly	Ala	Ser	Leu 505	Ile	Ser	Pro	Asn	Trp 510	Leu	Val
Ser	Ala	Ala 515	His	Cys	Tyr	Ile	Asp 520	Asp	Arg	Gly	Phe	Arg 525	Tyr	Ser	Asp
Pro	Thr 530	Gln	Xaa	Thr	Ala	Phe 535	Leu	Gly	Leu	His	Asp 540	Gln	Ser	Gln	Arg
er 45	Xaa	Leu	Gly	Сув	Arg 550	Ser	Ala	Gly	Ser	Ser 555	Ala	Ser	Ser	Pro	Thr 560
~~	Sar	802	Mat	mh-	e	D==	ee=	mb~	Mot		e	A ====	C	m	

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1214

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<400> 1195

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Gly Arg Ser Trp Phe Ser Gly Pro Ala Ala Pro Ala Ala Ala Met Ser 20 25 30

Phe Phe Pro Glu Leu Tyr Phe Asn Val Asp Asn Gly Tyr Leu Glu Gly 35 40 45

Leu Val Arg Gly Leu Lys Ala Gly Val Leu Ser Gln Ala Asp Tyr Leu 50 60

Asn Leu Val Gln Cys Glu Thr Leu Glu Asp Leu Lys Leu His Leu Gln 65 70 75 80

Ser Thr Asp Tyr Gly Asn Phe Leu Ala Asn Glu Ala Ser Pro Leu Thr 85 90 95

Val Ser Val Ile Asp Asp Arg Leu Lys Glu Lys Met Val Val Glu Phe 100 105 110

Arg His Met Arg Asn His Ala Tyr Glu Pro Leu Ala Ser Phe Leu Asp 115 120 125

Phe Ile Thr Tyr Ser Tyr Met Ile Asp Asn Val Ile Leu Leu Ile Thr 130 135 140

Gly Thr Leu His Gln Arg Ser Ile Ala Glu Leu Val Pro Lys Cys His 145 150 155 160

Pro Leu Gly Ser Phe Glu Gln Met Glu Ala Val Asn Ile Ala Gln Thr 165 170 175

Pro Ala Glu Leu Tyr Asn Ala Ile Leu Val Asp Thr Pro Leu Ala Ala 180 185 190

Phe Phe Gln Asp Cys Ile Ser Glu Gln Asp Leu Asp Glu Met Asn Ile 195 200 . 205

Glu Ile Ile Arg Asn Thr Leu Tyr Lys Ala Tyr Leu Glu Ser Phe Tyr 210 215 220

Lys Phe Cys Thr Leu Leu Gly Gly Thr Thr Ala Asp Ala Met Cys Pro

1216

225 230 235 240 Ile Leu Glu Phe Xaa Xaa Gln Thr Val Pro Ser Ser Phe His Thr Val 245 250 Xaa Gly Ser Thr Leu Arg Ala Trp Arg Xaa Gly Ser Gly 260 265 <210> 1196 <211> 301 <212> PRT <213> Homo sapiens <400> 1196 Arg His Glu Pro Ala Pro Arg Glu Ala Pro Gly Ser Arg Ala Ser Ala Phe Leu Leu Pro Ser Phe Leu Pro Gly Pro Arg Leu Val Pro Ala Gly 25 His Pro Thr Ala Thr Met Phe Val Pro Cys Gly Glu Ser Ala Pro Asp Leu Ala Gly Phe Thr Leu Leu Met Pro Ala Val Ser Val Gly Asn Val Gly Gln Leu Ala Met Asp Leu Ile Ile Ser Thr Leu Asn Met Ser Lys Ile Gly Tyr Phe Tyr Thr Asp Cys Leu Val Pro Met Val Gly Asn Asn Pro Tyr Ala Thr Thr Glu Gly Asn Ser Thr Glu Leu Ser Ile Asn Ala Glu Val Tyr Ser Leu Pro Ser Arg Lys Leu Val Ala Leu Gln Leu Arg 115 120 Ser Ile Phe Ile Lys Tyr Lys Ser Lys Pro Phe Cys Glu Lys Leu Leu 135 Ser Trp Val Lys Ser Ser Gly Cys Ala Arg Val Ile Val Leu Ser Ser 145 155 150 Ser His Ser Tyr Gln Arg Asn Asp Leu Gln Leu Arg Ser Thr Pro Phe 170 Arg Tyr Leu Leu Thr Pro Ser Met Gln Lys Ser Val Gln Asn Lys Ile

185

1217

Lys Ser Leu Asn Trp Glu Glu Met Glu Lys Ser Arg Cys Ile Pro Glu 200 Ile Asp Asp Ser Glu Phe Cys Ile Arg Ile Pro Gly Gly Gly Ile Thr 210 215 Lys Thr Leu Tyr Asp Glu Ser Cys Ser Lys Glu Ile Gln Met Ala Val Leu Leu Lys Phe Val Ser Glu Gly Asp Asn Ile Pro Asp Ala Leu Gly 245 250 Leu Val Glu Tyr Leu Asn Glu Trp Leu Gln Ile Leu Lys Pro Leu Ser 265 260 Asp Asp Pro Thr Val Ser Ala Ser Arg Trp Lys Ile Pro Ser Ser Trp 280 Arg Leu Leu Phe Gly Ser Gly Leu Pro Pro Ala Leu Phe 295 <210> 1197 <211> 246 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (49) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (65) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (230) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1197 Gly Thr Arg Asp Leu Leu Leu Ala Ala Ala Ala Thr Gly Lys Leu

Lys Ser Phe Ala Arg Lys Phe Ile Asn Leu Asn Glu Phe Thr Thr Tyr

25

Gly Ser Glu Glu Ser Thr Lys Pro Ala Ser Val Arg Ala Leu Leu Phe Xaa Ile Ser Phe Leu Met Leu Cys His Val Ala Gln Thr Tyr Gly Ser Xaa Val Ile Leu Ser Glu Ser Arg Thr Gly Ala Glu Val Pro Phe Phe Glu Thr Trp Met Gln Thr Cys Met Pro Glu Glu Gly Lys Ile Leu Asn Pro Asp His Pro Cys Phe Arg Pro Asp Ser Thr Lys Val Glu Ser Leu 100 105 Val Ala Leu Leu Asn Asn Ser Ser Glu Met Lys Leu Val Gln Met Lys 120 Trp His Glu Ala Cys Leu Ser Ile Ser Ala Ala Ile Leu Glu Ile Leu 135 Asn Ala Trp Glu Asn Gly Val Leu Ala Phe Glu Ser Ile Gln Lys Ile 155 Thr Asp Asn Ile Lys Gly Lys Val Cys Ser Leu Ala Val Cys Ala Val Ala Trp Leu Val Ala His Val Arg Met Leu Gly Leu Asp Glu Arg Glu 185 Lys Ser Leu Gln Met Ile Arg Gln Leu Ala Gly Pro Leu Phe Ser Glu 200 Asn Thr Leu Gln Phe Tyr Asn Glu Arg Val Val Ile Met Asn Ser Ile Leu Gly Ala His Val Xaa Arg Arg Ala Ala Ala Asp Ser His Ala Gly

Phe Lys Phe Pro Ser Asn

245

<210> 1198

<211> 465

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

		(203 Kaa (•	ls ar	ny of	the	nat	ural	lly o	occur	ring	J L-á	amino	aci	.ds
<22	21> 8	(460	•												
<22			equa]	.s ar	ny of	the	nat	ural	ly c	ccur	ring	, L−ē	umino	aci	.ds
<22	2> ((461)		s ar	ıy of	the	nat	ural	ly c	ccur	ring	L-a	minc	aci	.ds
			: Glu	Thr 5		Gln	Pro	Glu	Glu 10		Phe	Pro	Asn	Thr	Glu
Thr	Asn	Gly	7 Glu 20		: Gly	Lys	Arg	Pro 25		Glu	Asp	Met	Glu 30		Glu
Gln	Ala	Phe 35	_	Arg	Ser	Arg	Asn 40	Thr	Asp	Glu	Met	Va1 45		Leu	Arg
Ile	Leu 50		Gln	Ser	Lys	Asn 55	Ala	Gly	Ala	Val	Ile 60	Gly	Lys	Gly	Gly
65					70			_	-	75					Val 80
				85			_		90					95	Ile
			100					105					110		Glu Glu
		115					120					125			Asp
	130					135	Leu				140				
145					150		Lys			155					160
				165			Gln		170					175	
			180				Lys	185					190		

		195	,				200					205	i		
Lys	Ile 210		e Leu	Asp	Leu	Ile 215		Glu	Ser	Pro	11e 220	Lys	Gly	Arg	Ala
Gln 225		Туг	Asp	Pro	Asn 230		Tyr	Asp	Glu	Thr 235	-	Asp	Tyr	Gly	Gly 240
Phe	Thr	Met	Met	Phe 245	Asp	Asp	Arg	Arg	Gly 250	_	Pro	Val	Gly	Phe 255	Pro
Met	Arg	Gly	Arg 260	_	Gly	Phe	Asp	Arg 265	Met	Pro	Pro	Gly	Arg 270	Gly	Gly
Arg	Pro	Met 275		Pro	Ser	Arg	Arg 280	Asp	Tyr	Asp	Asp	Met 285		Pro	Arg
Arg	Gly 290	Pro	Pro	Pro	Pro	Pro 295	Pro	Gly	Arg	Gly	Gly 300	Arg	Gly	Gly	Ser
Arg 305	Ala	Arg	Asn	Leu	Pro 310	Leu	Pro	Pro	Pro	Pro 315	Pro	Pro	Arg	Gly	Gly 320
Asp	Leu	Met	Ala	Tyr 325	Asp	Arg	Arg	Gly	Arg 330	Pro	Gly	Asp	Arg	туr 335	Asp
Gly	Met	Val	Gly 340	Phe	ser	Ala	Asp	Glu 345	Thr	Trp	Asp	Ser	Ala 350	Ile	Asp
Thr	Trp	Ser 355	Pro	Ser	Glu	Trp	Gln 360	Met	Ala	Туг	Glu	Pro 365	Gln	Gly	Gly
Ser	Gly 370	Tyr	Asp	Tyr	Ser	Tyr 375	Ala	Gly	Gly	Arg	Gly 380	Ser	Tyr	Gly	Asp
Leu 385	Gly	Gly	Pro	Ile	Ile 390	Thr	Thr	Gln	Val	Thr 395	Ile	Pro	Lys	Asp	Leu 400
Ala	Gly	Ser	Ile	11e 405	Gly	Lys	Gly	Gly	Gln 410	Arg	Ile	Lys	Gln	Ile 415	Arg
His	Glu	Ser	Gly 420	Ala	Ser	Ile	Lys	11e 425	Asp	Glu	Pro	Leu	Glu 430	Gly	Ser
Glu	Asp	Arg 435	Ile	Ile	Thr	Ile	Thr 440	Gly	Thr	Gln	Asp	Gln 445	Ile	Gln	Asn
Ala	G1n 450	Tyr	Leu	Leu	Gln	Asn 455	ser	Val	Ser	Ser	Xaa 460	Xaa	Leu	Ala	Leu

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Gly Ile Asn Leu Phe Thr Asn Ser Phe Glu Gly Pro Val Leu Asp His
             . 40
Arg Tyr Tyr Ala Gly Gly Cys Ser Pro His Tyr Ile Leu Asn Thr Arg
Phe Arg Lys Pro Tyr Asn Val Glu Ser Tyr Thr Pro Gln Thr Gln Gly
                     70
                                         75
Lys Tyr Glu Phe Ile Leu Xaa Xaa Tyr Glu Ser Tyr Ser Asp Phe Glu
Arg Asn Val Thr Glu Lys Met Ala Ser Lys Ser Gly Phe Ser Phe Gly
           100
                               105
Phe Lys Ile Pro Gly Ile Phe Glu Leu Gly Ile Ser Ser Gln Ser Asp
                            120
Arg Gly Lys His Tyr Ile Arg Arg Thr Lys Arg Phe Ser His Thr Lys
   130
                       135
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145		. Pile	: ne	a nit	150) per	. vəl	, re	155		L ALC	a ni:	s ry.	160
Leu	Lys	Pro	Arç	Ser 165	Leu	ı Met	: Leu	His	170		ı Phe	e Let	ı Glr	175	
Lys	Arg	Leu	180		ı Glu	туг	Ser	Ту: 185	_	/ Glu	тул	Arg	190		ı Phe
Arg	Asp	Phe 195		/ Thr	His	Туг	200		Glu	a Ala	n Val	205		gl	7 Ile
Tyr	Glu 210		Thr	Leu	Val	Met 215		Lys	Glu	a Ala	220		Arg	Gly	Asp
Tyr 225		Leu	Asn	ı Asn	Val 230		Ala	Cys	Ala	Lys 235		Asp	Phe	: Lys	11e 240
Gly	Gly	Ala	Ile	: Glu 245	Glu	Val	Туг	Val	Ser 250		Gly	Val	. Ser	Val 255	_
Lys	Cys	Arg	Gly 260		Leu	Asn	Glu	Ile 265		Asp	Arg	Asn	Lys 270		Asp
Thr	Met	Val 275		Asp	Leu	Val	Val 280	Leu	Val	Arg	Gly	Gly 285		Ser	Glu
His	Ile 290	Thr	Thr	Leu	Ala	Tyr 295		Glu	Leu	Pro	Thr 300		Asp	Leu	Met
Gln 305	Glu	Trp	Gly	Asp	Ala 310	Val	Gln	Tyr	Asn	Pro 315	Ala	Ile	Ile	Lys	Val 320
Lys	Val	Glu	Pro	Leu 325	туг	Glu	Leu	Val	Thr 330	Ala	Thr	Asp	Phe	Ala 335	
Ser	Ser	Thr	Val 340	Arg	Gln	Asn	Met	Lys 345	Gln	Ala	Leu	Glu	Glu 350	Phe	Gln
Lys	Glu	Val 355	Ser	Ser	Cys	His	Cys 360	Ala	Pro	Cys	Gln	Gly 365	Asn	Gly	Val
Pro	Val 370	Leu	Lys	Gly	Ser	Arg 375	Cys	Asp	Cys	Ile	Cys 380	Pro	Val	Gly	Ser
31n 385	Gly	Leu	Ala	Cys	Glu 390	Val	Ser	Туг	Arg	Lys 395	Asn	Thr	Pro	Ile	Asp 400
Sly	Lys	Trp	Asn	Cys	Trp	Ser	Asn	Trp	Ser	Ser	Суз	Ser	Gly	Arg	Arg

Lys Thr Arg Gln Arg Gln Cys Asn Asn Pro Pro Pro Gln Asn Gly Gly 420 425 430

Ser Pro Cys Ser Gly Pro Ala Ser Glu Thr Leu Asp Cys Ser 435 440 445

<210> 1200

<211> 437

<212> PRT

<213> Homo sapiens

<400> 1200

Leu Gly Ser Ser Asp Ser Tyr Ala Ser Pro Gly Arg Ala Ala Ala Pro 1 5 10 15

Pro Ala Ala Ala Gly Pro Gly Asp Thr Ser Ala Cys Tyr Lys Ser Ser 20 25 30

Gly Pro Arg Cys Leu Leu Pro Asp Leu Ala Pro Ser Ser Glu Pro Gly 35 40 45

Ala Cys Leu Gly Gly Leu Ser Val Phe Thr Met Glu Gln Leu Ser Ser 50 60

Ala Asn Thr Arg Phe Ala Leu Asp Leu Phe Leu Ala Leu Ser Glu Asn 65 70 75 80

Asn Pro Ala Gly Asn Ile Phe Ile Ser Pro Phe Ser Ile Ser Ser Ala 85 90 95

Met Ala Met Val Phe Leu Gly Thr Arg Gly Asn Thr Ala Ala Gln Leu 100 105 110

Ser Lys Thr Phe His Phe Asn Thr Val Glu Glu Val His Ser Arg Phe 115 120 125

Gln Ser Leu Asn Ala Asp Ile Asn Lys Arg Gly Ala Ser Tyr Ile Leu 130 135 140

Lys Leu Ala Asn Arg Leu Tyr Gly Glu Lys Thr Tyr Asn Phe Leu Pro 145 150 155 160

Glu Phe Leu Val Ser Thr Gln Lys Thr Tyr Gly Ala Asp Leu Ala Ser 165 170 175

Val Asp Phe Gln His Ala Ser Glu Asp Ala Arg Lys Thr Ile Asn Gln 180 185 190

Trp	Val	. Lys 195		Gln	Thr	Glu	Gly 200	_	Ile	Pro	Glu	Leu 205		Ala	. Ser	
Gly	Met 210		. Asp	Asn	Met	Thr 215	-	Leu	Val	Leu	Val 220	Asn	Ala	Ile	Tyr	
Phe 225	_	Gly	Asn	Trp	Lys 230	Asp	Lys	Phe	Met	Lys 235	Glu	Ala	Thr	Thr	Asn 240	
Ala	Pro	Phe	Arg	Leu 245		Lys	Lys	Asp	Arg 250	Lys	Thr	Val	Lys	Met 255		
Туr	Gln	Lys	Lys 260	_	Phe	Ala	Tyr	Gly 265	Tyr	Ile	Glu	Asp	Leu 270	Lys	Cys	
Arg	Val	Leu 275		Leu	Pro	Tyr	Gln 280	Gly	Glu	Glu	Leu	Ser 285	Met	Val	Ile	
Leu	Leu 290	Pro	Asp	Asp	Ile	Glu 295	Asp	Glu	Ser	Thr	Gly 300	Leu	Lys	Lys	Ile	
Glu 305	Glu	Gln	Leu	Thr	Leu 310	Glu	Lys	Leu	His	Glu 315	Trp	Thr	Lys	Pro	Glu 320	
Asn	Leu	Asp	Phe	Ile 325	Glu	Val	Asn	Val	Ser 330	Leu	Pro	Arg	Phe	Lys 335	Leu	
Glu	Glu	Ser	Tyr 340	Thr	Leu	Asn	Ser	Asp 345	Leu	Ala	Arg	Leu	Gly 350	Val	Gln	
Asp	Leu	Phe 355	Asn	Ser	Ser	Lys	Ala 360	Asp	Leu	Ser	Gly	Met 365	Ser	Gly	Ala	
Arg	Asp 370	Ile	Phe	Ile	Ser	Lys 375	Ile	Val	His	Lys	Ser 380	Phe	Val	Glu	Val	
Asn 385	Glu	Glu	Gly	Thr	Glu 390	Ala	Ala	Ala	Ala	Thr 395	Ala	Gly	Ile	Ala	Thr 400	
Phe	Cys	Met	Leu	Met 405	Pro	Glu	Glu	Asn	Phe 410	Thr	Ala	Asp	His	Pro 415	Phe	
Leu	Phe	Phe	Ile 420	Arg		Asn			Gly	Ser	Ile	Leu	Phe	Leu	Gly	

Arg Phe Ser Ser Pro 435

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<211> 82
 <212> PRT
 <213> Homo sapiens
<220>
<221> SITE
<222> (82)
<223> Xaa equals any of the naturally occurring L-amino acids
Gln Leu Gly Pro Val Val Gly Gly Trp Tyr Lys Val Leu Asp Arg Phe
                                     10
Ile Pro Gly Thr Thr Lys Val Asp Ala Leu Lys Lys Met Leu Leu Asp
Gln Gly Gly Phe Ala Pro Cys Phe Leu Gly Cys Phe Leu Pro Leu Val
Gly Ala Leu Asn Gly Leu Ser Ala Gln Asp Asn Trp Pro Asn Tyr Ser
Gly Ile Ile Leu Met Pro Leu Ser Pro Thr Thr Ile Tyr Gly Leu Leu
                    70
Cys Xaa
<210> 1202
<211> 126
<212> PRT
<213> Homo sapiens
<400> 1202
Ile Ser Arg Ser Ser Ala Arg Arg Gln Pro Phe Arg His Gly Arg Leu
Trp Arg Ala Ala Ala Met Ala Leu Arg Tyr Pro Met Ala Val Gly Leu
             20
                                25
Asn Lys Gly His Lys Val Thr Lys Asn Val Ser Lys Pro Arg His Ser
                             40
Arg Arg Gly Arg Leu Thr Lys His Thr Lys Phe Val Arg Asp Met
                        55
Ile Arg Glu Val Cys Gly Phe Ala Pro Tyr Glu Arg Arg Ala Met Glu
```

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Leu Leu Lys Val Ser Lys Asp Lys Arg Ala Leu Lys Phe Ile Lys Lys
85 90 95

Arg Val Gly Thr His Ile Arg Ala Lys Arg Lys Arg Glu Glu Leu Ser 100 105 110

Asn Val Leu Ala Ala Met Arg Lys Ala Ala Ala Lys Lys Asp 115 120 125

<210> 1203

<211> 130

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (27)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1203

Asp Trp Asn Pro Asp Leu Gln Ala Ser Ala Val Cys Ile Lys Arg Val $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Gly Glu Ser Gly Pro Leu Ala Gln Glu Pro Xaa Leu Leu Lys Glu Gly
20 25 30

Phe Lys Ala Lys Trp Val Cys Gln Arg Cys Cys Leu Pro Phe Leu Glu 35 40 45

Met Leu Ile Ser Leu Ser Lys Thr Glu Lys Ser Arg Cys Tyr Arg Asn 50 55 60

Asn Leu Val Cys Cys Ile Asn Cys Ser Trp Ala Trp Ser Ser Ile Pro 65 70 75 80

Thr Leu Arg Phe Pro Ala Ser Leu Cys Cys Pro Gly Ser His Ser Cys 85 90 95

Arg Arg Pro Asn Pro Leu Ala Val Phe Cys Leu Lys Ile Trp Gly Ala 100 105 110

Pro Ser Leu Ser Ser Pro Gly Asn Ser Leu Ala Glu Gly Gly Asp Pro 115 120 125

Pro Gln

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<210> 1204
 <211> 228
 <212> PRT
 <213> Homo sapiens
 <220>
 <221> SITE
 <222> (189)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (196)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (199)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (225)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (228)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1204
Trp Ala Ala Phe Glu Pro Ala Thr Leu Ala Trp Lys Phe Pro Phe Gln
Ser Gly Phe Cys Leu Leu Pro Ser Pro Ser Pro Arg Tyr Leu Phe
                                 25
Thr Ser His Leu Ile Ser Leu Cys Ser Ser Val Ser Pro Thr His Ile
         35
                             40
                                                 45
Ile Gly Asp Ser Gly Gly Ser Leu Thr Ser Leu Leu Ser Asn Ala Arg
                         55
Pro Ser Gly Leu Ala Ser Val Ala Ser His Ile Asp Val Thr Leu Glu
 65
                     70
                                         75
Leu Leu Pro Gln Arg Gly Arg Arg Asp Arg Leu Ser Pro His Leu Pro
Pro Tyr Ser Pro Leu Tyr Ser Arq Phe Asp His Leu Ser Pro Ser Ala
```

Ala Pro Ser His Phe Gly Gln Ser Gln Ala Pro Ile Arg Leu Pro Pro Pro Pro Gly Ala Pro Ser Ile Ser Leu Ser Pro Leu Pro Gln Asn Leu 135 140 Cys Lys Gly Tyr Glu Arg Asp Pro Leu Pro Ser Arg Pro Pro Leu Arg 150 155 Ala Val Arg Ser Lys Lys Gln Lys Leu Val Gly Gly Trp Leu Gly Leu 165 170 Cys Pro Val Pro Arg Trp Asp Lys Leu Ala Phe Ser Xaa Ile Pro Ser 185 Trp Val Pro Xaa Ser Phe Xaa Ala Pro Gly Ala Arg Thr His Cys Ala Val Phe Leu Phe Ser Phe Val Gly Lys Gly Thr Lys Val Phe Ala Lys 215 Xaa Pro Val Xaa 225 <210> 1205 <211> 270 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (128) <223> Xaa equals any of the naturally occurring L-amino acids Leu Pro Gly Ala Val Ala Ala Ser Ser Gly Ser Pro Pro Gly Ser Ala 10 Leu Ala Ala Val Ala Ser Gly Gly Asp Leu Phe Pro Gly Gln Pro Val

Ala Gly Arg Phe Gly Ala Gly Gly Gly Ala Ala Gly Ala Val Leu Gly 50 55 60

Ser Glu Leu Ile Ala Gln Leu Leu Arg Ala Glu Pro Tyr Pro Ala Ala

25

20

Ile Asp Asn Val Cys Glu Leu Ala Ala Arg Leu Leu Phe Ser Thr Val

1229

65					70					75					80
Glu	Trp	Ala	Arg	His 85	Ala	Pro	Phe	Phe	Pro 90	Glu	Leu	Pro	Val	Ala 95	Asp
Gln	Val	Ala	Leu 100	Leu	Arg	Leu	Ser	Trp 105	Ser	Glu	Leu	Phe	Val 110	Leu	Asn
Ala	Ala	Gln 115	Ala	Ala	Leu	Pro	Leu 120	His	Thr	Ala	Pro	Leu 125	Leu	Ala	Xaa
Ala	Gly 130	Leu	His	Ala	Ala	Pro 135	Met	Ala	Ala	Glu	Arg 140	Ala	Val	Ala	Phe
Met 145	Asp	Gln	Val	Arg	Ala 150	Phe	Gln	Glu	Gln	Val 155	Asp	Lys	Leu	Gly	Arg 160
Leu	Gln	Val	Asp	Ser 165	Ala	Glu	Tyr	Gly	Cys 170	Leu	Lys	Ala	Ile	Ala 175	Leu
Phe	Thr	Pro	Asp 180	Ala	Суѕ	Gly	Leu	Ser 185	Asp	Pro	Ala	His	Val 190	Glu	Ser
Leu	Gln	Glu 195	Lys	Ala	Gln	Val	Ala 200	Leu	Thr	Glu	Tyr	Val 205	Arg	Ala	Gln
Tyr	Pro 210	Ser	Gln	Pro	Gln	Arg 215	Phe	Gly	Arg	Leu	Leu 220	Leu	Arg	Leu	Pro
Ala 225	Leu	Arg	Ala	Val	Pro 230	Ala	Ser	Leu	Ile	Ser 235	Gln	Leu	Phe	Phe	Met 240
Arg	Leu	Val	Gly	Lys 245	Thr	Pro	Ile	Glu	Thr 250	Leu	Ile	Arg	Asp	Met 255	Leu
Leu	ser	Gly	ser 260	Thr	Phe	Asn	Trp	Pro 265	Tyr	Gly	ser	Gly	Gln 270		
<210	> 12	06													

<211> 89

<212> PRT

<213> Homo sapiens

<400> 1206

Met Phe His Cys Ser Asp Lys Tyr Phe Thr Phe Phe Ser Val His Gln

Arg Glu Arg Asp Pro Pro Thr Ala Val Thr Ser Lys Cys Ser Cys Ser 25

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Ile Asn Gly Val Thr Asp Thr Glu Val His Ser Trp Phe Leu Ser Arg 35 40 45

Val Val Ile Leu Val Ser Trp Ser Leu Gly His Trp Gly Cys Thr Leu 50 55 60

Lys Ser Pro Asn Arg Leu Ala Ile Lys Ile Asn Lys Ala Ala Ala Pro 65 70 75 80

Phe Gln Phe Thr Phe His Leu Thr Gln 85

<210> 1207

<211> 145

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (137)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1207

Cys Val Gly Lys Ala Gly Val Glu Leu Gly Cys Ser Gly Glu Gly Val 1 5 10 15

Val Lys Lys Ala Ser Ser Arg Gly His Lys Ala Arg Phe Pro Leu Arg 20 25 30

Ser His Lys Val Leu Ser Pro Ala Pro Gly Ala Gly Gly Val His Gly 35 40 45

Pro Gly Phe Thr Ser Thr His Pro Ala His Pro Arg Gly Glu Gly Pro 50 55 60

Arg Ala Pro Gly Pro Ala Ala Asp Arg Ile Leu Cys Lys Leu Cys Ser

Val His Cys Lys Thr Pro Ala Gln Leu Ala Gly His Met Gln Thr His 85 90 95

Leu Gly Gly Ala Ala Pro Leu Ser Arg Glu Thr Pro Pro Ser His Ser

Pro Pro Ala Glu Gly Asp Pro Arg Thr His Gln Val Leu Val Arg Phe 115 120 125

Val Gln Trp Arg Arg Gln Arg Gln Xaa Arg Gln Arg Gln Gln Arg Gln

1231

130 135 140 Gln 145 <210> 1208 <211> 378 <212> PRT <213> Homo sapiens <400> 1208 Ser Ala Ser Arg Ala Thr Ala Met Ser Ser Arg Gly Gly Lys Lys 10 15 Ser Thr Lys Thr Ser Arg Ser Ala Lys Ala Gly Val Ile Phe Pro Val Gly Arg Met Leu Arg Tyr Ile Lys Lys Gly His Pro Lys Tyr Arg Ile Gly Val Gly Ala Pro Val Tyr Met Ala Ala Val Leu Glu Tyr Leu Thr Ala Glu Ile Leu Glu Leu Ala Gly Asn Ala Ala Arg Asp Asn Lys Lys 70 Gly Arg Val Thr Pro Arg His Ile Leu Leu Ala Val Ala Asn Asp Glu Glu Leu Asn Gln Leu Leu Lys Gly Val Thr Ile Ala Ser Gly Gly Val 100 105 Leu Pro Asn Ile His Pro Glu Leu Leu Ala Lys Lys Arg Gly Ser Lys 120 Gly Lys Leu Glu Ala Ile Ile Thr Pro Pro Pro Ala Lys Lys Ala Lys 135 140 Ser Pro Ser Gln Lys Lys Pro Val Ser Lys Lys Ala Gly Gly Lys Lys 155 Gly Ala Arg Lys Ser Lys Lys Gln Gly Glu Val Ser Lys Ala Ala Ser 170 Ala Asp Ser Thr Thr Glu Gly Thr Pro Ala Asp Gly Phe Thr Val Leu 185

Ser Thr Lys Ser Leu Phe Leu Gly Gln Lys Leu Asn Leu Ile His Ser

200

Glu Ile Ser Asn Leu Ala Gly Phe Glu Val Glu Ala Ile Ile Asn Pro 215 Thr Asn Ala Asp Ile Asp Leu Lys Asp Asp Leu Gly Asn Thr Leu Glu Lys Lys Gly Gly Lys Glu Phe Val Glu Ala Val Leu Glu Leu Arg Lys 250 Lys Asn Gly Pro Leu Glu Val Ala Gly Ala Ala Val Ser Ala Gly His 260 265 Gly Leu Pro Ala Lys Phe Val Ile His Cys Asn Ser Pro Val Trp Gly 280 Ala Asp Lys Cys Glu Glu Leu Leu Glu Lys Thr Val Lys Asn Cys Leu 295 Ala Leu Ala Asp Asp Lys Lys Leu Lys Ser Ile Ala Phe Pro Ser Ile Gly Ser Gly Arg Asn Gly Phe Pro Lys Gln Thr Ala Ala Gln Leu Ile 330 Leu Lys Ala Ile Ser Ser Tyr Phe Val Ser Thr Met Ser Ser Ser Ile 345 Lys Thr Val Tyr Phe Val Leu Phe Asp Ser Glu Ser Ile Gly Ile Tyr Val Gln Glu Met Ala Lys Leu Asp Ala Asn 370 375 <210> 1209 <211> 220 <212> PRT <213> Homo sapiens <220> <221> SITE

<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<222> (6)

<22	?1>		equal	.s an	y of	the	nat	ural	ly c	ccur	ring	L-a	mino	aci	ds
-10	.0. 1	200													
			' Lys	Ile 5		Asp	Thr	Phe	Xaa 10	-	туr	Ala	Arg	Arg 15	Tyr
Arg	Ser	Gly	Ile 20		Gly	Ser	Thr	His 25		Xaa	Ala	Pro	Gly 30		Met
Arg	Leu	Ser 35		Pro	Leu	Leu	Leu 40	Leu	Leu	Leu	Gly	Ala 45	Trp	Ala	Ile
Pro	Gly 50	-	Leu	Gly	Asp	Arg 55	Ala	Pro	Leu	Thr	Ala 60	Thr	Ala	Pro	Gln
Leu 65	Asp	Asp	Glu	Glu	Met 70	Tyr	Ser	Ala	His	Met 75	Pro	Ala	His	Leu	Arg 80
Cys	Asp	Ala	Cys	Arg 85	Ala	Val	Ala	Tyr	G1n 90	Met	Trp	Gln	Asn	Leu 95	Ala
Lys	Ala	Glu	Thr 100	Lys	Leu	His	Thr	ser 105	Asn	Ser	Gly	Gly	Arg 110	Arg	Glu
Leu	Ser	Glu 115	Leu	Val	Tyr	Thr	Asp 120	Val	Leu	Asp	Arg	Ser 125	Cys	Ser	Arg
Asn	Trp 130	Gln	Asp	Tyr	Gly	Val 135	Arg	Glu	Val	Asp	Gln 140	Val	Lys	Arg	Leu
Thr 145	Gly	Pro	Gly	Leu	Ser 150	Glu	Gly	Pro	Glu	Pro 155	Ser	Ile	Ser	Val	Met 160
Val	Thr	Gly	Gly	Pro 165	Trp	Pro	Thr	Arg	Leu 170	Ser	Arg	Thr	Cys	Leu 175	His
Tyr	Leu	Gly	Glu 180	Phe	Gly	Glu	Asp	Gln 185	Ile	Tyr	Glu	Ala	His 190	Gln	Gln
Gly	Arg	Gly 195	Ala	Leu	Glu		Leu 200	Leu	Суз	Gly		Pro 205	Gln	Gly	Ala
Cys	Ser 210	Glu	Lys	Val		Ala 215	Thr	Arg	Glu		Leu 220				

<210> 1210

<211> 231 <212> PRT <213> Homo sapiens

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<400> 1210

Ala Leu Ser Pro Ala Met Val Val Pro Glu Asp Gln Leu Thr Arg Trp 1 5 10 15

His Pro Arg Phe Asn Val Asp Glu Val Pro Asp Ile Glu Pro Ala Ala 20 25 30

Leu Pro Gln Pro Pro Ala Thr Glu Lys Leu Thr Thr Ala Gln Glu Val 35 40 45

Leu Ala Arg Ala Arg Asn Leu Ile Ser Pro Arg Met Glu Lys Ala Leu 50 55 60

Ser Gln Leu Ala Leu Arg Ser Ala Ala Pro Ser Ser Pro Gly Ser Pro 65 70 75 80

Arg Pro Ala Leu Pro Ala Thr Pro Pro Ala Thr Pro Pro Ala Ala Ser 85 90 95

Pro Ser Ala Leu Lys Gly Val Ser Gln Asp Leu Leu Glu Arg Ile Arg 100 105 110

Ala Lys Glu Ala Gln Lys Gln Leu Ala Gln Met Thr Arg Cys Pro Glu 115 120 125

Gln Glu Gln Arg Leu Gln Arg Leu Glu Arg Leu Pro Glu Leu Ala Arg 130 135 140

Val Leu Arg Ser Val Phe Val Ser Glu Arg Lys Pro Ala Leu Ser Met 145 150 155 160

Glu Val Ala Cys Ala Arg Met Val Gly Ser Cys Cys Thr Ile Met Ser 165 170 175

Pro Gly Glu Met Glu Lys His Leu Leu Leu Leu Ser Glu Leu Leu Pro 180 185 190

Asp Trp Leu Ser Leu His Arg Ile Arg Thr Asp Thr Tyr Val Lys Leu 195 200 205

Asp Lys Ala Ala Asp Leu Ala His Ile Thr Ala Arg Leu Ala His Gln 210 215 220

Thr Arg Ala Glu Glu Gly Leu 225 230

<210> 1211 <211> 346 <212> PRT <213> Homo sapiens <400> 1211 Asn Cys Thr Thr Ile Ser Leu Val Tyr Leu His Phe Val Phe Tyr Asn Ser Tyr Ser Leu Phe Pro Ser Lys Glu Asn Cys Val Tyr Glu Thr Val Val Leu Pro Leu Asp Glu Arg Ala Phe Glu Lys Thr Leu Thr Pro Ile Ile Gln Glu Tyr Phe Glu His Gly Asp Thr Asn Glu Val Ala Glu Met 55 Leu Arg Asp Leu Asn Leu Gly Glu Met Lys Ser Gly Val Pro Val Leu Ala Val Ser Leu Ala Leu Glu Gly Lys Ala Ser His Arg Glu Met Thr Ser Lys Leu Ser Asp Leu Cys Gly Thr Val Met Ser Thr Thr Asp Val Glu Lys Ser Phe Asp Lys Leu Leu Lys Asp Leu Pro Glu Leu Ala 120 Leu Asp Thr Pro Arg Ala Pro Gln Leu Val Gly Gln Phe Ile Ala Arg 135 Ala Val Gly Asp Gly Ile Leu Cys Asn Thr Tyr Ile Asp Ser Tyr Lys Gly Thr Val Asp Cys Val Gln Ala Arg Ala Ala Leu Asp Lys Ala Thr 165 170 Val Leu Leu Ser Met Ser Lys Gly Gly Lys Arg Lys Asp Ser Val Trp 185 Gly Ser Gly Gly Gln Gln Ser Val Asn His Leu Val Lys Glu Ile 200 Asp Met Leu Leu Lys Glu Tyr Leu Leu Ser Gly Asp Ile Ser Glu Ala Glu His Cys Leu Lys Glu Leu Glu Val Pro His Phe His His Glu Leu 225 230 235

1236

Val Tyr Glu Ala Ile Ile Met Val Leu Glu Ser Thr Gly Glu Ser Thr 250 Phe Lys Met Ile Leu Asp Leu Leu Lys Ser Leu Trp Lys Ser Ser Thr 265 Ile Thr Val Asp Gln Met Lys Arg Gly Tyr Glu Arg Ile Tyr Asn Glu Ile Pro Asp Ile Asn Leu Asp Val Pro His Ser Tyr Ser Val Leu Glu 295 Arg Phe Val Glu Glu Cys Phe Gln Ala Gly Ile Ile Ser Lys Gln Leu 310 315 Arg Asp Leu Cys Pro Ser Arg Gly Arg Lys Arg Phe Val Ser Glu Gly 325 330 Asp Gly Gly Arg Leu Lys Pro Glu Ser Tyr <210> 1212 <211> 175 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (3) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (63) <223> Xaa equals any of the naturally occurring L-amino acids Pro Arg Xaa Ile Val Ser Ala Ala Cys Gly Arg Asn His Thr Leu Ala 10 Leu Thr Glu Thr Gly Ser Val Phe Ala Phe Gly Glu Asn Lys Met Gly 25

Gln Leu Gly Leu Gly Asn Gln Thr Asp Ala Val Pro Ser Pro Ala Gln

Ile Met Tyr Asn Gly Gln Pro Ile Thr Lys Met Ala Cys Gly Xaa Glu

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Phe Ser Met Ile Met Asp Cys Lys Gly Asn Leu Tyr Ser Phe Gly Cys 75 65 70 Pro Glu Tyr Gly Gln Leu Gly His Asn Ser Asp Gly Lys Phe Ile Ala 90 Arg Ala Gln Arg Ile Glu Tyr Asp Cys Glu Leu Val Pro Arg Arg Val 105 . 110 Ala Ile Phe Ile Glu Lys Thr Lys Asp Gly Gln Ile Leu Pro Val Pro 120 Asn Val Val Arg Asp Val Ala Cys Gly Ala Asn His Thr Leu Val 135 Leu Asp Ser Gln Lys Arg Val Phe Ser Trp Gly Phe Gly Gly Tyr Gly Arg Leu Gly Thr Gln Ser Arg Arg Met Arg Trp Ser Pro Ala Trp 165 170 <210> 1213 <211> 127 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (41) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1213 Cys Phe Ile Cys Val Trp Cys Lys Arg Lys Leu Asp Gln Ile Asn Leu

Ile Asn Thr His Thr Val His Leu Xaa Lys Gly Gln Val Ile Ser His 35 40 45

Gln Leu Met Ser Pro Asn Ala Asn Thr Gly Thr His Met His Thr Pro

Pro Asn Phe Thr Ser Thr Asp Pro Leu Ala Pro Thr Pro Ala Ser Thr

Val Thr Ser Lys Ala Arg Ala Thr Cys Ala His Gln Thr Cys Ile Lys 65 70 75 80

Gln Leu Ala Gly Asp Gly Cys Gly Ala Gly Gly Leu Ser Asp Gly Ser

1238

85 90 95

Leu Leu Leu Pro Leu Leu Arg Val Lys Leu Leu Ser Phe Leu Arg Val 100 105 110

Tyr Leu Cys Gln Val Cys Ala Phe Asn Cys Phe Tyr Phe Val Phe 115 120 125

<210> 1214

<211> 146

<212> PRT

<213> Homo sapiens

<400> 1214

Cys Thr Trp Asn Arg Cys Ser Ala Ser Pro Ala Gly Trp Gln Asn Ser 1 5 10 15

Phe Leu Gly His Leu Asn Pro Ser Ser Leu Leu Gln Asn Pro Pro Ala 20 25 30

As AArg Ile Gly Met Gly Ala Thr Leu Asp Ile Gln Arg Gln Gln Arg 35 40 45

Met Glu Leu Leu Asp Arg Gln Leu Met Phe Ser Gln Phe Ala Gln Gly 50 55 60

Arg Arg Gln Arg Gln Gln Gln Gly Gly Met Ile Asn Trp Asn Arg Leu 65 70 75 80

Phe Pro Pro Leu Arg Gln Arg Gln Asn Val Asn Tyr Gln Gly Gly Arg 85 90 95

Gln Ser Glu Pro Ala Ala Pro Pro Leu Glu Val Ser Glu Glu Gln Val
100 105 110

Ala Arg Leu Met Glu Met Gly Phe Ser Arg Gly Asp Ala Leu Glu Ala 115 120 125

Leu Arg Ala Ser Asn Asn Asp Leu Asn Val Ala Thr Asn Phe Leu Leu 130 135 140

Gln His 145

<210> 1215

<211> 116

<212> PRT

1239

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<213> Homo sapiens
<220>
<221> SITE
<222> (107)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (108)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1215
Leu Lys Asn His Gln Lys Thr His Thr Ser Glu Lys Ser Tyr Lys Cys
Asn Glu Cys Arg Lys Ala Phe Ser Tyr Cys Ser Gly Leu Ile Gln Cys
Gln Val Ile His Thr Ile Glu Lys Pro Tyr Glu Tyr Gly Lys Cys Gly
                             40
Lys Ala Phe Arg Gln Arg Thr Asp Leu Lys Lys His Gln Lys Met His
                         55
Thr Glu Glu Lys Pro Tyr Glu Cys Asn Glu Cys Gly Lys Ala Phe Ser
 65
                                        75
                     70
Gln Ser Thr Tyr Leu Thr Lys His Gln Lys Ile His Ser Glu Glu Lys
Ser Asn Ile His Thr Glu Cys Gly Glu Thr Xaa Xaa Gln Asn Ser Ser
           100
                                105
Phe Leu Gln Gln
        115
<210> 1216
<211> 201
<212> PRT
<213> Homo sapiens
<400> 1216
Ala Ala Gly Gly Glu Gly Phe Gly Ser Leu His Ala Ser Leu Val Gly
```

Phe Arg Gly Val Val Ala Gly Cys Ala Arg His Phe Arg Ala Ser Arg 20 25 30

Asn Gly Val Ala Asn Gly Leu Gln Ser Asn Met Pro Lys Phe Tyr Cys 40 Asp Tyr Cys Asp Thr Tyr Leu Thr His Asp Ser Pro Ser Val Arg Lys 55 Thr His Cys Ser Gly Arg Lys His Lys Glu Asn Val Lys Asp Tyr Tyr 70 Gln Lys Trp Met Glu Glu Gln Ala Gln Ser Leu Ile Asp Lys Thr Thr Ala Ala Phe Gln Gln Gly Lys Ile Pro Pro Thr Pro Phe Ser Ala Pro 100 105 Pro Pro Ala Gly Ala Met Ile Pro Pro Pro Pro Ser Leu Pro Gly Pro 120 Pro Arg Pro Gly Met Met Pro Ala Pro His Met Gly Gly Pro Pro Met 135 Met Pro Met Met Gly Pro Pro Pro Gly Met Met Pro Val Gly Pro Ala Pro Gly Met Arg Pro Pro Met Gly Gly His Met Pro Met Met Pro 170 Gly Pro Pro Met Met Arg Pro Pro Ala Arg Pro Met Met Val Pro Thr 180 185 Arg Pro Gly Met Thr Arg Pro Asp Arg

<210> 1217 <211> 473 <212> PRT

<213> Homo sapiens

<400> 1217

Lys Phe Thr Met Lys Phe Leu Leu Ile Leu Leu Gln Ala Thr Ala 1 5 10 15

Ser Gly Ala Leu Pro Leu Asn Ser Ser Thr Ser Leu Glu Lys Asn Asn 20 25 30

Val Leu Phe Gly Glu Arg Tyr Leu Glu Lys Phe Tyr Gly Leu Glu Ile 35 40 45

Asn Lys Leu Pro Val Thr Lys Met Lys Tyr Ser Gly Asn Leu Met Lys

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	50)				55					60)			
G1u 65	_	: Ile	Gln	Glu	Met 70		His	Phe	Leu	Gly 75		Lys	. Val	Thr	Gly 80
Gln	Leu	Asp	Thr	Ser 85		Leu	Glu	Met	Met 90		Ala	Pro	Arg	Cys 95	-
Val	Pro	Asp	Val 100		His	Phe	Arg	Glu 105		Pro	Gly	Gly	Pro		Trp
Arg	Lys	His 115	_	Ile	Thr	Tyr	Arg 120		Asn	Asn	Tyr	Thr 125		Asp	Met
Asn	Arg 130	Glu	Asp	Val	Asp	Туг 135	Ala	Ile	Arg	Lys	Ala 140		Gln	Val	Trp
Ser 145	Asn	Val	Thr	Pro	Leu 150	_	Phe	Ser	Lys	Ile 155		Thr	Gly	Met	Ala 160
Asp	Ile	Leu	Val	Val 165	Phe	Ala	Arg	Gly	Ala 170		Gly	Asp	Phe	His 175	Ala
Phe	Asp	Gly	Lys 180	Gly	Gly	Ile	Leu	Ala 185	His	Ala	Phe	Gly	Pro 190	Gly	Ser
Gly	Ile	Gly 195	Gly	Asp	Ala	His	Phe 200	Asp	Glu	Asp	Glu	Phe 205	Trp	Thr	Thr
His	Ser 210	Gly	Gly	Thr	Asn	Leu 215	Phe	Leu	Thr	Ala	Val 220	His	Glu	Ile	Gly
His 225	Ser	Leu	Gly	Leu	Gly 230	His	Ser	Ser	Asp	Pro 235	Lys	Ala	Val	Met	Phe 240
Pro	Thr	Tyr	Lys	Tyr 245	Val	Asp	Ile	Asn	Thr 250	Phe	Arg	Leu	Ser	Ala 255	Asp
/ab	Ile	Arg	Gly 260	Ile	Gln	Ser	Leu	Tyr 265	Gly	Asp	Pro	Lys	Glu 270	Asn	Gln
Arg	Leu	Pro 275	Asn	Pro	Asp	Asn	Ser 280	Glu	Pro	Ala	Leu	Cys 285	Asp	Pro	Asn
eu	Ser 290	Phe	Asp	Ala	Val	Thr 295	Thr	Val	Gly	Asn	Lys 300	Ile	Phe	Phe	Phe
ys 105	Asp	Arg	Phe	Phe	Trp 310	Leu	Lys	Val	ser	Glu 315	Arg	Pro	Lys	Thr	Ser 320
al	Asn	Leu	Ile	Ser	Ser	Leu	Trp	Pro	Thr	Leu	Pro	Ser	Gly	Ile	Glu

1242

325 335 330 Ala Ala Tyr Glu Ile Glu Ala Arg Asn Gln Val Phe Leu Phe Lys Asp 340 345 Asp Lys Tyr Trp Leu Ile Ser Asn Leu Arg Pro Glu Pro Asn Tyr Pro 360 Lys Ser Ile His Ser Phe Gly Phe Pro Asn Phe Val Lys Lys Ile Asp 375 Ala Ala Val Phe Asn Pro Arg Phe Tyr Arg Thr Tyr Phe Phe Val Asp 390 395 Asn Gln Tyr Trp Arg Tyr Asp Glu Arg Arg Gln Met Met Asp Pro Gly Tyr Pro Lys Leu Ile Thr Lys Asn Phe Gln Gly Ile Gly Pro Lys Ile 420 425 Asp Ala Val Phe Tyr Ser Lys Asn Lys Tyr Tyr Tyr Phe Phe Gln Gly 440 Ser Asn Gln Phe Glu Tyr Asp Phe Leu Leu Gln Arg Ile Thr Lys Thr 455 Leu Lys Ser Asn Ser Trp Phe Gly Cys 465 470 <210> 1218 <211> 598 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (9) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (144) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1218 Ala Thr Ser Arg Gln Pro Ser Tyr Xaa Arg Thr Trp Cys Arg Arg Cys

Cys Leu Pro Leu Ala Leu Asn Pro Val Pro Ala Ala Met Ala Pro Gly

WO 00/55350

1243

PCT/US00/05882

			20					25					30		
Gln	Leu	Ala 35		Phe	ser	Val	. Ser 40	-	Lys	Thr	Gly	Leu 45		Glu	Phe
Ala	Arg 50		Leu	Thr	Ala	Leu 55	_	Leu	Asn	Leu	Val		. Ser	Gly	Gly
Thr 65		Lys	Ala	Leu	Arg 70	_	Ala	Gly	Leu	Ala 75		Arg	Asp	Val	Ser 80
Glu	Leu	Thr	Gly	Phe 85	Pro	Glu	Met	Leu	Gly 90		Arg	Val	Lys	Thr 95	
His	Pro	Ala	Val 100		Ala	Gly	Ile	Leu 105		Arg	Asn	Ile	Pro 110		Asp
Asn	Ala	Asp 115		Ala	Arg	Leu	Asp 120		Asn	Leu	Ile	Arg 125		Val	Ala
Cys	Asn 130	Leu	Tyr	Pro	Phe	Val 135		Thr	Val	Ala	Ser 140		Gly	Val	Xaa
Val 145	Glu	Glu	Ala	Val	Glu 150	Gln	Ile	Asp	Ile	Gly 155	Gly	Val	Thr	Leu	Leu 160
Arg	Ala	Ala	Ala	Lys 165	Asn	His	Ala	Arg	Val 170	Thr	Val	Val	Cys	Glu 175	Pro
Glu	Asp	Tyr	Val 180	Val	Val	Ser	Thr	Glu 185	Met	Gln	Ser	Ser	Glu 190	Ser	Lys
Asp	Thr	Ser 195	Leu	Glu	Thr	Arg	Arg 200	Gln	Leu	Ala	Leu	Lys 205	Ala	Phe	Thr
His	Thr 210	Ala	Gln	Tyr	Asp	Glu 215	Ala	Ile	Ser	Asp	Туг 220	Phe	Arg	Lys	Gln
Tyr 225	Ser	Lys	Gly	Val	ser 230	Gln	Met	Pro	Leu	Arg 235	Tyr	Gly	Met	Asn	Pro 240
His	Gln	Thr	Pro	Ala 245	Gln	Leu	Tyr	Thr	Leu 250	Gln	Pro	ГÀЗ	Leu	Pro 255	Ile
Thr	Val	Leu	Asn 260	Gly	Ala	Pro	Gly	Phe 265	Ile	Asn	Leu	Cys	Asp 270	Ala	Leu
Asn	Ala	Trp 275	Gln	Leu	Val	Lys	Glu 280	Leu	Lys	Glu	Ala	Leu 285	Gly	Ile	Pro
Ala	Δla	Ala	Ser	Dhe	T.370	Hic	17a 1	Ser	Pro	Δla	Glv	Ala	Ala	Va1	Glv

1244

295 300 290 Ile Pro Leu Ser Glu Asp Glu Ala Lys Val Cys Met Val Tyr Asp Leu Tyr Lys Thr Leu Thr Pro Ile Ser Ala Ala Tyr Ala Arg Ala Arg Gly 325 330 Ala Asp Arg Met Ser Ser Phe Gly Asp Phe Val Ala Leu Ser Asp Val 345 Cys Asp Val Pro Thr Ala Lys Ile Ile Ser Arg Glu Val Ser Asp Gly Ile Ile Ala Pro Gly Tyr Glu Glu Glu Ala Leu Thr Ile Leu Ser Lys Lys Lys Asn Gly Asn Tyr Cys Val Leu Gln Met Asp Gln Ser Tyr Lys 395 Pro Asp Glu Asn Glu Val Arg Thr Leu Phe Gly Leu His Leu Ser Gln 410 Lys Arg Asn Asn Gly Val Val Asp Lys Ser Leu Phe Ser Asn Val Val 420 425 Thr Lys Asn Lys Asp Leu Pro Glu Ser Ala Leu Arg Asp Leu Ile Val Ala Thr Ile Ala Val Lys Tyr Thr Gln Ser Asn Ser Val Cys Tyr Ala 455 Lys Asn Gly Gln Val Ile Gly Ile Gly Ala Gly Gln Gln Ser Arg Ile His Cys Thr Arg Leu Ala Gly Asp Lys Ala Asn Tyr Trp Trp Leu Arg 485 490 His His Pro Gln Val Leu Ser Met Lys Phe Lys Thr Gly Val Lys Arg 505 Ala Glu Ile Ser Asn Ala Ile Asp Gln Tyr Val Thr Gly Thr Ile Gly 520 Glu Asp Glu Asp Leu Ile Lys Trp Lys Ala Leu Phe Glu Glu Val Pro Glu Leu Leu Thr Glu Ala Glu Lys Lys Glu Trp Val Glu Lys Leu Thr Glu Val Ser Ile Ser Ser Asp Ala Phe Phe Pro Phe Arg Asp Asn Val

(245

565 575 570 Asp Arg Ala Lys Arg Ser Gly Val Ala Tyr Ile Ala Ala Pro Pro Val Leu Leu Leu Thr Lys Leu 595 <210> 1219 <211> 209 <212> PRT <213> Homo sapiens <400> 1219 Tyr Thr Ala Ile Met Ser Ile Met Ser Tyr Asn Gly Gly Ala Val Met Ala Met Lys Gly Lys Asn Cys Val Ala Ile Ala Ala Asp Arg Arg Phe 25 30 Gly Ile Gln Ala Gln Met Val Thr Thr Asp Phe Gln Lys Ile Phe Pro 40 Met Gly Asp Arg Leu Tyr Ile Gly Leu Ala Gly Leu Ala Thr Asp Val 50 55 Gln Thr Val Ala Gln Arg Leu Lys Phe Arg Leu Asn Leu Tyr Glu Leu Lys Glu Gly Arg Gln Ile Lys Pro Tyr Thr Leu Met Ser Met Val Ala 90 85 Asn Leu Leu Tyr Glu Lys Arg Phe Gly Pro Tyr Tyr Thr Glu Pro Val 105 Ile Ala Gly Leu Asp Pro Lys Thr Phe Lys Pro Phe Ile Cys Ser Leu 115 120 125 Asp Leu Ile Gly Cys Pro Met Val Thr Asp Asp Phe Val Val Ser Gly 135 Thr Cys Ala Glu Gln Met Tyr Gly Met Cys Glu Ser Leu Trp Glu Pro 150 Asn Met Asp Pro Asp His Leu Phe Glu Thr Ile Ser Gln Ala Met Leu 170

Asn Ala Val Asp Arg Asp Ala Val Ser Gly Met Gly Val Ile Val His

185

Ile Ile Glu Lys Asp Lys Ile Thr Thr Arg Thr Leu Lys Ala Arg Met
195 200 205

Asp

<210> 1220

<211> 140

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (51)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (64)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (77)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1220

Ile Ile Ser Ile Ile Ser Thr Ser Asn Lys Ile Lys Met Ser Glu Ala 1 5 10 15

Pro Arg Phe Phe Val Gly Pro Glu Asp Thr Glu Ile Asn Pro Gly Asn 20 25 30

Tyr Arg His Phe His His Ala Asp Glu Asp Asp Glu Glu Glu Asp 35 40 45

Asp Ser Xaa Pro Glu Arg Gln Ile \dot{V} al Val Gly Ile Cys Ser Met Xaa 50 55 60

Lys Lys Ser Lys Ser Lys Pro Met Lys Glu Ile Leu Xaa Arg Ile Ser 65 70 75 80

Leu Phe Lys Tyr Ile Thr Val Val Val Phe Glu Glu Glu Val Ile Leu 85 90 95

Asn Glu Pro Val Glu Asn Trp Pro Leu Cys Asp Cys Leu Ile Ser Phe 100 105 110

1247

His Ser Lys Gly Phe Pro Leu Asp Lys Ala Val Ala Tyr Ala Lys Leu 115 120 125

Arg Asn Pro Phe Val Ile Asn Asp Leu Asn Met Gln 130 135 140

<210> 1221

<211> 45

<212> PRT

<213> Homo sapiens

<400> 1221

Gly Leu Met Glu Ile Glu Ile Thr Cys Lys Asp Ile Thr Val Phe Met 1 5 10 15

Ser Tyr Ile Leu Val Leu Glu Ile Val Glu Cys Met Ile Asp Asn Ile 20 25 30

Phe Leu Ile Phe Ile Phe Ser Ser Asn Thr Ser Thr Val

<210> 1222

<211> 70

<212> PRT

<213> Homo sapiens

<400> 1222

Val Ala Tyr Ile Cys Tyr Ser Lys Phe Cys Lys Tyr Ala Asn Gln Leu 1 5 10 15

Tyr Arg Phe Ile Thr Ser Phe Leu Gly Phe Phe Trp Gly Arg Val Ile 20 25 30

Ile Leu Leu Lys Ile Thr Met Asn Thr Leu Thr Val Arg Ile Cys Gly 35 40 45

Lys Val Pro Leu Asn Ile Thr Lys Ile Ile Ser Leu Glu Gly Arg Asn 50 55 60

Asn His Ser Asn Glu Leu 65 70

<210> 1223

<211> 88

<212> PRT

<213> Homo sapiens

<400> 1223

Phe Tyr Pro Ser Thr Tyr Leu Lys Ala Pro Ser Ser Leu Val Cys Gly
1 5 10 15

Val Leu Glu Pro Val Ser Ser Phe Trp Arg Phe Lys Leu Asn Ser Asn 20 25 30

Asn Tyr Val Thr Gln Ser Met Trp Arg Lys Ser Glu Thr Ser His Gly
35 40 45

Asp Ala Gly Pro Arg Ala Arg Pro Ala Val Trp Pro Ala Leu Leu Thr 50 55 60

Ser Val Ser Arg Ser Phe Pro Ser His Glu Val Pro Ser Gly His Gly 65 70 75 80

Asp Glu Gly Arg Glu Gly Thr Gly 85

<210> 1224

<211> 298

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (279)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1224

Ala Thr Arg Arg Arg Ala Ala Glu Ala Gly Met Ala Ala Val Leu Gln
1 5 10 15

Arg Val Glu Arg Leu Ser Asn Arg Val Val Arg Val Leu Gly Cys Asn 20 25 30

Pro Gly Pro Met Thr Leu Gln Gly Thr Asn Thr Tyr Leu Val Gly Thr 35 40 45

Gly Pro Arg Arg Ile Leu Ile Asp Thr Gly Glu Pro Ala Ile Pro Glu
50 55 60

Tyr Ile Ser Cys Leu Lys Gln Ala Leu Thr Glu Phe Asn Thr Ala Ile 65 70 75 80

Gln Glu Ile Val Val Thr His Trp His Arg Asp His Ser Gly Gly Ile 85 90 95

Gly Asp Ile Cys Lys Ser Ile Asn Asn Asp Thr Thr Tyr Cys Ile Lys 105 Lys Leu Pro Arg Asn Pro Gln Arg Glu Glu Ile Ile Gly Asn Gly Glu 120 Gln Gln Tyr Val Tyr Leu Lys Asp Gly Asp Val Ile Lys Thr Glu Gly 135 Ala Thr Leu Arg Val Leu Tyr Thr Pro Gly His Thr Asp Asp His Met 150 155 Ala Leu Leu Glu Glu Glu Asn Ala Ile Phe Ser Gly Asp Cys Ile 170 165 Leu Gly Glu Gly Thr Thr Val Phe Glu Asp Leu Tyr Asp Tyr Met Asn Ser Leu Lys Glu Leu Leu Lys Ile Lys Ala Asp Ile Ile Tyr Pro Gly 200 His Gly Pro Val Ile His Asn Ala Glu Ala Lys Ile Gln Gln Tyr Ile Ser His Arg Asn Ile Arg Glu Gln Gln Ile Leu Thr Leu Phe Arg Glu Asn Phe Glu Lys Ser Phe Thr Val Met Glu Leu Val Lys Ile Ile Tyr 250 Lys Asn Thr Pro Glu Asn Leu His Glu Met Ala Lys His Asn Leu Leu 260 265 Leu His Leu Lys Lys Leu Xaa Lys Glu Gly Lys Ile Phe Ser Asn Thr 280 Asp Pro Asp Lys Lys Trp Lys Ala His Leu 290 295

<210> 1225

<211> 27

<212> PRT

<213> Homo sapiens

<400> 1225

Val Ser Gly Asp Tyr Gly His Pro Val Tyr Ile Val Gln Asp Gly Pro

Pro Gln Ser Pro Pro Asn Ile Tyr Tyr Lys Val

<210> 1226

<211> 380

<212> PRT

<213> Homo sapiens

<400> 1226

Glu Glu Leu Asp Thr Leu Lys Arg Lys Ser Pro Ser Asp Leu Trp 1 5 10 15

Lys Glu Asp Leu Ala Thr Phe Ile Glu Glu Leu Glu Ala Val Glu Ala
20 25 30

Lys Glu Lys Gln Asp Glu Gln Val Gly Leu Pro Gly Lys Val Gly Lys
35 40 45

Ala Lys Gly Lys Lys Thr Gln Met Ala Glu Val Leu Pro Ser Pro Arg
50 55 60

Gly Gln Arg Val Ile Pro Arg Ile Thr Ile Glu Met Lys Ala Glu Ala 65 70 75 80

Glu Lys Lys Asn Lys Lys Lys Ile Lys Asn Glu Asn Thr Glu Gly Ser 85 90 95

Pro Gln Glu Asp Gly Val Glu Leu Glu Gly Leu Lys Gln Arg Leu Glu 100 105 110

Lys Lys Gln Lys Arg Glu Pro Gly Thr Lys Thr Lys Lys Gln Thr Thr 115 120 125

Leu Ala Phe Lys Pro Ile Lys Lys Gly Lys Lys Arg Asn Pro Trp Ser 130 135 140

Asp Ser Glu Ser Asp Arg Ser Ser Asp Glu Ser Asn Phe Asp Val Pro 145 150 155 160

Pro Arg Glu Thr Glu Pro Arg Arg Ala Ala Thr Lys Thr Lys Phe Thr 165 170 175

Met Asp Leu Asp Ser Asp Glu Asp Phe Ser Asp Phe Asp Glu Lys Thr 180 185 190

Asp Asp Glu Asp Phe Val Pro Ser Asp Ala Ser Pro Pro Lys Thr Lys 195 200 205

Thr Ser Pro Lys Leu Ser Asn Lys Glu Leu Lys Pro Gln Lys Ser Val

	210					215					220				
Val 225		Asp	Leu	Glu	Ala 230	Asp	Asp	Val	Lys	G1y 235		Val	Pro	Leu	Ser 240
Ser	Ser	Pro	Pro	Ala 245	Thr	His	Phe	Pro	Asp 250		Thr	Glu	Ile	Thr 255	Asn
Pro	Val	Pro	Lys 260	Lys	Asn	Val	Thr	Val 265	Lys	Lys	Thr	Ala	Ala 270	Lys	Ser
Gln	Ser	Ser 275	Thr	Ser	Thr	Thr	Gly 280	Ala	Lys	Lys	Arg	Ala 285	Ala	Pro	Lys
Gly	Thr 290	Lys	Ārg	Asp	Pro	Ala 295	Leu	Asn	Ser	Gly	Val 300	Ser	Gln	Lys	Pro
Asp 305	Pro	Ala	Lys	Thr	Lys 310	Asn	Arg	Arg	Lys	Arg 315	Lys	Pro	Ser	Thr	Ser 320
Asp	Asp	Ser	Asp	Ser 325	Asn	Phe	Glu	Lys	Ile 330	Val	Ser	Lys	Ala	Val 335	Thr
Ser	Lys	Lys	Ser 340	Lys	Gly	Glu	Ser	Asp 345	Asp	Phe	His	Met	Asp 350	Phe	Asp
Ser	Ala	Val 355	Ala	Pro	Arg	Ala	Lys 360	Ser	Val	Arg	Ala	Lys 365	Lys	Pro	Ile
Lys	Tyr 370	Leu	Glu	Glu	Ser	Asp 375	Glu	Asp	Asp	Leu	Phe 380				
<211 <212)> 12 i> 78 !> PR	: LT	apie	ns											
<222	.> SI :> (2	6)	uals	any	of	the	natu	rall	у ос	ccurr	ing	L-an	nino	ació	ls
	> 12 Asn	-	Leu	Lys 5	Cys	Leu	Phe	Gly	Ile 10	Met	Ile	Gly	Asn	Leu 15	Asp
Glu	Phe	Arg	Gly 20	Lys	Lys	Leu	Ser	Ala 25	Xaa	Met	Leu	Arg	Ala 30	His	Leu

Ser Pro His Thr Pro Thr Glu Leu Thr Gly Leu Gln Cys Phe Ile Arg
35 40 45

Lys Phe Pro Ile Pro Leu Ser Cys Val Phe Met Leu Lys Ile Leu Leu 50 55 60

His Phe Ser Phe Glu Cys Gln Phe Leu Thr Ser Thr Ile Ser 65 70 75

<210> 1228

WO 00/55350

<211> 222

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (142)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1228

Ala Asn Glu Lys Val Ala Leu Gln Lys Ala Leu Leu Tyr Tyr Glu Ser 1 5 10 15

Ile His Gly Arg Pro Val Thr Lys Asn Glu Arg Gln Val Met Lys Pro 20 25 30

Leu Tyr Asp Arg Tyr Arg Leu Val Lys Gln Ile Leu Ser Arg Ala Asn
35 40 45

Thr Ile Pro Ile Ile Gly Ser Pro Ser Ser Lys Arg Arg Ser Pro Leu 50 60

Leu Gln Pro Ile Ile Glu Gly Glu Thr Ala Ser Phe Phe Lys Glu Ile
65 70 75 80

Lys Glu Glu Glu Glu Gly Ser Glu Asp Asp Ser Asn Val Lys Pro Asp 85 90 95

Phe Met Val Thr Leu Lys Thr Asp Phe Ser Ala Arg Cys Phe Leu Asp

Gln Phe Glu Asp Asp Ala Asp Gly Phe Ile Ser Pro Met Asp Asp Lys 115 120 125

Ile Pro Ser Lys Cys Ser Gln Asp Thr Gly Leu Ser Asn Xaa His Ala

Ala Ser Ile Pro Glu Leu Leu Glu His Leu Gln Glu Met Arg Glu Glu 145 150 155 160

1253

Lys Lys Arg Ile Arg Lys Lys Leu Arg Asp Phe Glu Asp Asn Phe Phe 165 170 175

Arg Gln Asn Gly Arg Asn Val Gln Lys Glu Asp Arg Thr Pro Met Ala 180 185 190

Glu Glu Tyr Ser Glu Tyr Lys His Ile Lys Ala Lys Leu Arg Leu Leu 195 200 205

Glu Val Leu Ile Ser Lys Arg Asp Thr Asp Ser Lys Ser Met 210 215 220

<210> 1229

<211> 220

<212> PRT

<213> Homo sapiens

<400> 1229

Lys Gly Ser Thr Leu Gly His Leu Cys Thr Ala Met Ala Gly Met Met $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$

Lys Gly Ile Arg Trp Ser Cys Pro Ala Ile Ala Ser Ile Ser Gln Thr $20 \hspace{1cm} 25 \hspace{1cm} 30$

Arg Ser Ser Gln Glu Lys Asp Ser Ser Ser Pro Pro Trp Asp Leu Arg 35 40 45

Arg Ala Ala Thr Glu Gly Glu Ala Pro Asp Ala Leu Cys Gln Ser Gln 50 60

Val Arg Gly Gln Ser Ser Pro Cys His Pro Trp Cys Arg Pro Ala Pro 65 70 75 80

Ser Ser Phe Met Pro Gly Pro Ala Gly Thr Pro Ala Thr Thr Glu Ser 85 90 95

Thr Arg Ser Ala Leu Cys Ser Trp Arg Arg His Ser Arg Val Glu Ser 100 105 110

Cys Pro Ser Leu Ser Leu Gly His Leu Gly Gly Glu Ser Gly Leu Arg 115 120 125

Ser Glu Leu Asp Pro Gly Asp Leu Gly Ser Phe Phe Leu Ala His Gln 130 135 140

Pro Cys Arg Pro His Leu Ser Gln Asn Pro Leu Cys Leu Gly Gly Ser 145 150 155 160

1254

Gly Ser Ala Leu Leu Cys Ser Arg Arg Leu Gly Ser Gly Gln His Gln 165 170 Val Gly Lys Trp Ser Pro Pro Ser Cys Phe Cys Arg Ile Leu Thr Val 180 185 Gly Leu Glu Glu Lys Ser Ile Asp Leu Ile Ser Pro Thr Thr His Pro 195 200 205 Ser Phe Ser Phe Phe His His Ser Pro Pro Gln Leu 210 215 <210> 1230 <211> 183 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (11) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (12) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (19) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (30) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1230 Glu Leu Lys Arg Leu Thr Ile Gly Lys Asn Xaa Xaa Arg Leu Thr Gly 10 Asn Arg Xaa Gly Ile Pro Gly Ser Thr His Ala Ser Glu Xaa Glu Val 25 Glu Glu Glu Gly Asp Val Asp Ser Asp Glu Glu Glu Glu Glu Asp Glu Glu Ser Ser Ser Glu Gly Leu Glu Ala Glu Asp Trp Ala Gln Gly Val

Val Glu Ala Gly Gly Ser Phe Gly Ala Tyr Gly Ala Gln Glu Glu Ala 65 70 75 80

Gln Cys Pro Thr Leu His Phe Leu Glu Gly Glu Asp Ser Asp Ser 85 90 95

Asp Ser Glu Glu Glu Asp Asp Glu Glu Glu Asp Asp Glu Asp 100 105 110

Asp Asp Asp Glu Glu Asp Gly Asp Glu Val Pro Val Pro Ser Phe 115 120 125

Gly Glu Ala Met Ala Tyr Phe Ala Met Val Lys Arg Tyr Leu Thr Ser 130 140

Phe Pro Ile Asp Asp Arg Val Gln Ser His Ile Leu His Leu Glu His 145 150 150 160

Asp Leu Val His Val Thr Arg Lys Asn His Ala Arg Gln Ala Gly Val $165 \hspace{1.5cm} 170 \hspace{1.5cm} 175$

Arg Gly Leu Gly His Gln Ser 180

<210> 1231

<211> 59

<212> PRT

<213> Homo sapiens

<400> 1231

As Leu Tyr Lys Leu Lys Leu As His Glu Leu Gln Lys Lys Ser Ile ${\bf 1}$ 5 ${\bf 10}$ 15

Leu Pro Lys Leu Asp Val Thr Thr Leu Thr Ser Leu Lys Tyr Glu Val
20 25 30

Asp Cys Leu Lys Asp Ser Ala Tyr Ile Leu Val Cys Thr Phe Arg Asn 35 40 45

Ile Phe Leu Gly Lys Ser Thr Gln His Phe Leu 50 55

<210> 1232

<211> 135

<212> PRT

<213> Homo sapiens

1256

<400> 1232 Gly Ser Thr His Ala Ser Gly Pro Pro Gln Ala Pro Gln Leu Ile Tyr 5 10 Gln Glu Tyr Val Asn Gln Pro Asp Val Arg Pro Gln Pro Pro Ser Pro 25 Arg Glu Gly Pro Leu Pro Ala Ala Arg Pro Ala Gly Ala Thr Leu Glu 35 40 Arg Ala Lys Thr Leu Ser Pro Gly Lys Asn Gly Val Val Lys Asp Val Phe Ala Phe Gly Gly Ala Val Glu Asn Pro Glu Tyr Leu Thr Pro Gln Gly Gly Ala Ala Pro Gln Pro His Pro Pro Pro Ala Phe Ser Pro Ala Phe Asp Asn Leu Tyr Tyr Trp Asp Gln Asp Pro Pro Glu Arg Gly Ala 105 Pro Pro Ser Thr Phe Lys Gly Thr Pro Thr Ala Glu Asn Pro Glu Tyr 115 120 Leu Gly Leu Asp Val Pro Val 130 <210> 1233 <211> 134 <212> PRT <213> Homo sapiens <400> 1233 Arg Gly Glu Thr Arg Glu Met Ala Gly Asn Leu Leu Ser Gly Ala Gly 10 Arg Arg Leu Trp Asp Trp Val Pro Leu Ala Cys Arg Ser Phe Ser Leu 20 25 Gly Val Pro Arg Leu Ile Gly Ile Arg Leu Thr Leu Pro Pro Lys 40 Val Val Asp Arg Trp Asn Glu Lys Arg Ala Met Phe Gly Val Tyr Asp

Asn Ile Gly Ile Leu Gly Asn Phe Glu Lys His Pro Lys Glu Leu Ile

Arg Gly Pro Ile Trp Leu Arg Gly Trp Lys Gly Asn Glu Leu Gln Arg
85 90 95

Cys Ile Arg Lys Arg Lys Met Val Gly Ser Arg Met Phe Ala Asp Asp 100 105 110

Leu His Asn Leu Asn Lys Arg Ile Arg Tyr Leu Tyr Lys His Phe Asn 115 120 125

Arg His Gly Lys Phe Arg 130

<210> 1234

<211> 282

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (8)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (18)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1234

Thr Gly Pro Glu Phe Pro Gly Xaa Pro Thr Arg Pro Arg Thr Ala Ala 1 5 10 15

Ala Xaa Ser Ala Arg Thr Arg Thr Arg Gly Ser Pro Arg Met Gly Glu 20 25 30

Phe Asn Glu Lys Lys Thr Thr Cys Gly Thr Val Cys Leu Lys Tyr Leu 35 40 45

Leu Phe Thr Tyr Asn Cys Cys Phe Trp Leu Ala Gly Leu Ala Val Met 50 55 60

Ala Val Gly Ile Trp Thr Leu Ala Leu Lys Ser Asp Tyr Ile Ser Leu 65 70 75 80

Leu Ala Ser Gly Thr Tyr Leu Ala Thr Ala Tyr Ile Leu Val Val Ala 85 90 95

Gly Thr Val Val Met Val Thr Gly Val Leu Gly Cys Cys Ala Thr Phe 100 105 110

Lys	Glu	Arg 115	Arg	·Asn	Leu	Leu	Arg 120	Leu	Tyr	Phe	Ile	Leu 125	Leu	Leu	11
Ile	Phe 130	Leu	Leu	Glu	Ile	Ile 135	Ala	Gly	Ile	Leu	Ala 140	Tyr	Ala	туг	ту
Gln 145	Gln	Leu	Asn	Thr	Glu 150	Leu	Lys	Glu	Asn	Leu 155	Lys	Asp	Thr	Met	Th 16
Lys	Arg	Tyr	His	Gln 165	Pro	Gly	His	Glu	Ala 170	Val	Thr	Ser	Ala	Val 175	As
Gln	Leu	Gln	Gln 180	Glu	Phe	His	Сув	Cys 185	Gly	Ser	Asn	Asn	Ser 190	Gln	As
Trp	Arg	Asp 195	Ser	Glu	Trp	Ile	Arg 200	Ser	Gln	Glu	Ala	Gly 205	Gly	Arg	۷a
Val	Pro 210	Asp	Ser	Cys	Cys	Lys 215	Thr	Val	Val	Ala	Leu 220	Cys	Gly	Gln	Ar
Asp 225	His	Ala	Ser	Asn	Ile 230	Tyr	Lys	Val	Glu	Gly 235	Gly	Cys	Ile	Thr	Lу:
Leu	Glu	Thr	Phe	Ile 245	Gln	Glu	His	Leu	Arg 250	Val	Ile	Gly	Ala	Val 255	Gl
Ile	Gly	Ile	Ala 260	Cys	Val	Gln	Val	Phe 265	Gly	Met	Ile	Phe	Thr 270	Cys	Сys
Leu	Tyr	Arg 275	Ser	Leu	Lys	Leu	Glu 280	His	Tyr						•

<210> 1235 <211> 66

<212> PRT

<213> Homo sapiens

<400> 1235

Ala Glu Ile Gln Val Phe Gln Val Gly Leu Val Ser Trp Gly Leu Tyr
1 5 10 15

Asn Pro Cys Leu Gly Ser Ala Asp Lys Asn Ser Arg Lys Arg Ala Pro 20 25 30

Arg Ser Lys Val Pro Pro Pro Arg Asp Phe His Ile Asn Leu Phe Arg $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

1259

Met Gln Pro Trp Leu Arg Gln His Leu Gly Asp Val Leu Asn Phe Leu 50 60

Pro Leu

65

<210> 1236

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1236

Ala Arg Arg Arg Gly Gly Trp Ala Gly Gly Gly Gly Gly Thr Arg
1 5 10 15

Arg Ala Leu Gly Val Pro Val Ala Arg Arg Arg Arg Met Trp Arg Ala 20 25 30

Glu Gly Lys Trp Leu Pro Lys Thr Ser Arg Lys Ser Val Ser Gln Ser 35 40 45

Val Phe Cys Gly Thr Ser Thr Tyr Cys Val Leu Asn Thr Val Pro Pro 50 55 60

Ile Glu Asp Asp His Gly Asn Ser Asn Ser Ser His Val Lys Ile Phe 65 70 75 80

Leu Pro Lys Lys Leu Leu Glu Cys Leu Pro Lys Cys Ser Ser Leu Pro 85 90 95

Lys Glu Arg His Arg Trp Asn Thr Asn Glu Arg Ser

<210> 1237

<211> 116

<212> PRT

<213> Homo sapiens

<400> 1237

Arg Gly Gly Gly Ser Lys Gly Asn Glu Val Arg Pro Val Ala Gly Ser 1 5 10 15

Ala Glu Ser Ala Ala Leu Arg Leu Arg Ala Pro Leu Gln Gln Val Gln
20 25 30

Ala Gln Leu Ser Pro Leu Gln Asn Ile Ser Pro Trp Ile Leu Ala Val $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

1260

Leu Thr Leu Gln Ile Gln Ser Leu Ile Ser Cys Trp Ala Phe Trp Thr Thr Trp Thr Gln Ser Cys Ser Ser Asn Ala Leu Pro Gln Ser Leu Pro 70 75 Ala Trp Arg Ser Ser Gln Arg Ser Thr Gln Lys Asp Pro Val Pro Tyr Gln Pro Pro Phe Leu Cys Gln Trp Gly Arg His Gln Pro Ser Trp Lys 105 Pro Leu Met Asn 115 <210> 1238 <211> 311 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (16) <223> Xaa equals any of the naturally occurring L-amino acids Val Thr Ser Glu Gly Val Arg Val Arg Ser Ser Arg Gly Arg Ala Xaa Gly Val Trp Arg Phe Glu Arg Asp Glu Asp Gly Thr Gly Ala Gly Cys 20 25 Gly Gln Trp Thr Arg Phe Cys Arg Glu Pro Lys Met Ala Val Asn Val Tyr Ser Thr Ser Val Thr Ser Asp Asn Leu Ser Arg His Asp Met Leu 55 Ala Trp Ile Asn Glu Ser Leu Gln Leu Asn Leu Thr Lys Ile Glu Gln Leu Cys Ser Gly Ala Ala Tyr Cys Gln Phe Met Asp Met Leu Phe Pro Gly Ser Ile Ala Leu Lys Lys Val Lys Phe Gln Ala Lys Leu Glu His 105

Glu Tyr Ile Gln Asn Phe Lys Ile Leu Gln Ala Gly Phe Lys Arg Met

		115					120					125	,		
Gly	Val 130		Lys	Ile	Ile	Pro 135		Asp	Lys	Leu	Val	-	Gly	Lys	Phe
Gln 145	Asp	Asn	Phe	Glu	Phe 150		Gln	Trp	Phe	Lys 155	-	Phe	Phe	Asp	Ala 160
Asn	Tyr	Asp	Gly	Lys 165	Asp	Tyr	Asp	Pro	Val 170		Ala	Arg	Gln	Gly 175	Gln
Glu	Thr	Ala	Val 180	Ala	Pro	Ser	Leu	Val 185	Ala	Pro	Ala	Leu	Asn 190	Lys	Pro
Lys	Lys	Pro 195	Leu	Thr	Ser	Ser	ser 200	Ala	Ala	Pro	Gln	Arg 205	Pro	Ile	Ser
Thr	Gln 210	Arg	Thr	Ala	Ala	Ala 215	Pro	Lys	Ala	Gly	Pro 220	Gly	Val	Val	Arg
Lys 225	Asn	Pro	Gly	Val	Gly 230	Asn	Gly	Asp	Asp	Glu 235	Ala	Ala	Glu	Leu	Met 240
Gln	Gln	Val	Asn	Val 245	Leu	Lys	Leu	Thr	Val 250	Glu	Asp	Leu	Glu	Lys 255	Glu
Arg	Asp	Phe	Туг 260	Phe	Gly	Lys	Leu	Arg 265	Asn	Ile	Glu	Leu	Ile 270	-	Gln
Glu	Asn	Glu 275	Gly	Glu	Asn	Asp	Pro 280	Val	Leu	Gln	Arg	Ile 285	Val	Asp	Ile
	Tyr 290	Ala	Thr	Asp	Glu	Gly 295	Phe	Val	Ile	Pro	Asp 300	Glu	Gly	Gly	Pro
Gln 305	Glu	Glu	Gln	Glu	Glu 310	Tyr									٠
<210 <211 <212 <213	> 34 > PR	5	apie	ns											
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Ser Asp Val Glu Gly Leu Phe Asp Ser Pro Pro Gly Ser Asp Asp Ala 20 25 30

Lys	s Let	1 Ile 35) Ile	e Phe	ту	r Pro		7 Asp	Gln	Gln	Ser 45		. Thi	c Pho
Gl	7 Thi 50		s Ser	Arg	y Val	. Gl ₃	y Met	: Gly	Gly	Met	Glu 60		Lys	val	L Ly:
Ala 65		ı Leı	ı Trp	Ala	Leu 70		ı Gly	Gly	Thr	Ser 75		Val	. Ile	: Ala	A Ası 80
Gly	Thr	His	Pro	Lys 85		. Sei	Gly	His	90		Thr	Asp	Ile	• Val	
Gly	' Lys	Lys	Val 100		Thr	Phe	Phe	Ser 105		Val	Lys	Pro	Ala 110		Pro
Thr	· Val	. Glu 115		Gln	Gly	Glu	Met 120		Arg	Ser	Gly	Gly 125	_	Met	: Leu
Ala	Thr 130		Glu	Pro	Glu	Gln 135	Arg	Ala	Glu	Ile	Ile 140		His	Leu	Ala
Asp 145		Leu	Thr	Asp	Gln 150		Asp	Glu	Ile	Leu 155	Leu	Ala	Asn	Lys	160
Asp	Leu	Glu	Glu	Ala 165		Gly	Arg	Leu	Ala 170	Ala	Pro	Leu	Leu	Lys 175	
Leu	Ser	Leu	Ser 180	Thr	Ser	Lys	Leu	Asn 185	Ser	Leu	Ala	Ile	Gly 190	Leu	Arg
Gln	Ile	Ala 195		Ser	Ser	Gln	Asp 200	Ser	Val	Gly	Arg	Val 205	Leu	Arg	Arg
Thr	Arg 210	Ile	Ala	Lys	Asn	Leu 215	Glu	Leu	Glu	Gln	Val 220	Thr	Val	Pro	Ile
Gly 225	Val	Leu	Leu	Val	Ile 230	Phe	Glu	Ser	Arg	Pro 235	Asp	Суз	Leu	Pro	Gln 240
Val	Ala	Ala	Leu	Ala 245	Ile	Ala	Ser	Gly	Asn 250	Gly	Leu	Leu	Leu	Lys 255	Gly
Gly	Lys	Glu	Ala 260	Ala	His	Ser	Asn	Arg 265	Ile	Leu	His	Leu	Leu 270	Thr	Gln
Glu	Ala	Leu 275	Ser	Ile	His	Gly	Val 280	Lys	Glu	Ala	Val	Gln 285	Leu	Val	Asn
Thr	Arg 290	Glu	Glu	Val	Glu	Asp 295	Leu	Cys	Arg		Asp 300	Lys	Met	Ile	Asp

WO 00/55350

PCT/US00/05882

1263

Leu Ile Ile Pro Arg Gly Ser Ser Gln Leu Val Arg Asp Ile Gln Lys 305 310 315 320

Ala Ala Lys Gly Ile Pro Val Met Gly His Ser Glu Gly Ile Cys Ala 325 330 335

His Val Cys Gly Phe Arg Gly Gln Cys 340 345

<210> 1240

<211> 87

<212> PRT

<213> Homo sapiens

<400> 1240

Gly Tyr Cys Phe Ile Ser Thr Ser Arg Thr Pro Lys Glu Thr Ile Trp

1 5 10 15

Val Lys Ala Thr Ser Thr Ala Leu Ala Leu His Arg Phe Leu Glu Phe 20 25 30

Leu Ser Phe Thr Phe Ser Leu Thr Gln His Cys Leu Leu Phe Val Phe 35 40 45

Val Ala Trp Phe Val Phe Phe Leu Pro Cys Ser Pro Asn Leu Cys Pro 50 60

Asn Ser Phe Gly Leu Met Gln Lys Tyr Leu Cys Gly Arg Glu Glu Leu 65 70 75 80

Phe Ser Trp Arg Ala Phe Arg

85

<210> 1241

<211> 196

<212> PRT

<213> Homo sapiens

<400> 1241

Arg Ala Gly Ser Pro Ala Ser Pro Ala His Val Ala Trp Pro Pro Ala 1 5 10 15

Pro Thr Trp Ser Arg Ala Leu Pro Arg Val Ala Pro Arg Ser Ser Ser 20 25 30

Arg Arg Gly Arg Arg Tyr Pro Glu Arg Ser Gln Arg Arg Arg Glu Val

35 40 45 Ala Ala Thr Ala Met Pro Lys Asn Lys Gly Lys Gly Lys Asn Arg 55 60 Arg Arg Gly Lys Asn Glu Asn Glu Ser Glu Lys Arg Glu Leu Val Phe Lys Glu Asp Gly Gln Glu Tyr Ala Gln Val Ile Lys Met Leu Gly Asn 85 Gly Arg Leu Glu Ala Met Cys Phe Asp Gly Val Lys Arg Leu Cys His 105 Ile Arg Gly Lys Leu Arg Lys Lys Val Trp Ile Asn Thr Ser Asp Ile 115 120 125 Ile Leu Val Gly Leu Arg Asp Tyr Gln Asp Asn Lys Ala Asp Val Ile 135 Leu Lys Tyr Asn Ala Asp Glu Ala Arg Ser Leu Lys Ala Tyr Gly Glu 150 155 Leu Pro Glu His Ala Lys Ile Asn Glu Thr Asp Thr Phe Gly Pro Gly 170 Asp Asp Asp Glu Ile Gln Phe Asp Asp Ile Gly Asp Asp Asp Glu Asp 185 Ile Asp Asp Ile 195 <210> 1242 <211> 218 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (3) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (7) <223> Xaa equals any of the naturally occurring L-amino acids

Ala Val Xaa Phe Lys Asp Xaa Ile Tyr Glu Ile Phe Gln Lys Leu Asn

<400> 1242

1265

5 10 15 Thr Ser Ile Gln Val Val Leu Leu Ser Ala Thr Met Pro Thr Asp Val 20 25 Leu Glu Val Thr Lys Lys Phe Met Arg Asp Pro Ile Arg Ile Leu Val Lys Lys Glu Glu Leu Thr Leu Glu Gly Ile Lys Gln Phe Tyr Ile Asn Val Glu Arg Glu Glu Trp Lys Leu Asp Thr Leu Cys Asp Leu Tyr Glu Thr Leu Thr Ile Thr Gln Ala Val Ile Phe Leu Asn Thr Arg Arg Lys 85 90 Val Asp Trp Leu Thr Glu Lys Met His Ala Arg Asp Phe Thr Val Ser 100 105 Ala Leu His Gly Asp Met Asp Gln Lys Glu Arg Asp Val Ile Met Arg 125 115 120 Glu Phe Arg Ser Gly Ser Ser Arg Val Leu Ile Thr Thr Asp Leu Leu 135 Ala Arg Gly Ile Asp Val Gln Gln Val Ser Leu Val Ile Asn Tyr Asp 150 155 Leu Pro Thr Asn Arg Glu Asn Tyr Ile His Arg Ile Gly Arg Gly Gly Arg Phe Gly Arg Lys Gly Val Ala Ile Asn Phe Val Thr Glu Glu Asp 185 Lys Arg Ile Leu Arg Asp Ile Glu Thr Phe Tyr Asn Thr Thr Val Glu 200 Glu Met Pro Met Asn Val Ala Asp Leu Ile 210 215

<210> 1243

<211> 173

<212> PRT

<213> Homo sapiens

<400> 1243

Leu Asp Gly Ser Ala Arg Ala Glu Leu Ala Leu Ser Val Ala Val Asn
1 5 10 15

<222> (72)

<400> 1244

1

Val Ala Pro Gly Arg Leu Cys Ala Gly Arg Tyr Ser Ser Asp Val Gln 25 Glu Met Ile Leu Ser Ser Ala Thr Ala Asp Arg Ile Pro Ile Ala Val 35 40 Ser Gly Val Arg Gly Met Gly Phe Leu Met Arg His His Ile Glu Thr 55 Gly Gly Gln Leu Pro Ala Lys Leu Ser Ser Leu Phe Val Lys Cys 65 70 75 Leu Gln Asn Pro Ser Ser Asp Ile Arg Leu Val Ala Glu Lys Met Ile Trp Trp Ala Asn Lys Asp Pro Leu Pro Pro Leu Asp Pro Gln Ala Ile 100 105 110 Lys Pro Ile Leu Lys Ala Leu Leu Asp Asn Thr Lys Asp Lys Asn Thr 120 Val Val Arg Ala Tyr Ser Asp Gln Ala Ile Val Asn Leu Leu Lys Met Arg Gln Gly Glu Glu Val Phe Gln Ser Leu Ser Lys Ile Leu Asp Val Ala Ser Leu Glu Val Leu Asn Glu Val Asn Arg Ser Pro 165 170 <210> 1244 <211> 222 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (17) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE

<223> Xaa equals any of the naturally occurring L-amino acids

Tyr Ile Lys Ile Tyr Gln Gly Glu Glu Leu Pro His Pro Lys Ser Met

Xaa	Gln	Ala	Thr 20	Ala	Glu	Ala	Asn	Asn 25	Leu	Ala	Ala	Val	Ala 30	Thr	Ala
Lys	Asp	Thr 35	Tyr	Asn	Lys	Lys	Met 40	Glu	Glu	Ile	Cys	Gly 45	Gly	Asp	Lys
Pro	Phe 50	Leu	Ala	Pro	Asn	Asp 55	Leu	Gln	Thr	Lys	His 60	Leu	Gln	Leu	Lys
Glu 65	Glu	Ser	Val	Lys	Leu 70	Phe	Xaa	Gly	Val	Lys 75	Lys	Met	Gly	Gly	Glu 80
Glu	Phe	Ser	Arg	Arg 85	Tyr	Leu	Gln	Gln	Leu 90	Glu	Ser	Glu	Ile	Asp 95	Glu
Leu	Tyr	Ile	Gln 100	Tyr	Ile	Lys	His	Asn 105	Asp	Ser	Lys	Asn	Ile 110	Phe	His
Ala	Ala	Arg 115	Thr	Pro	Ala	Thr	Leu 120	Phe	Val	Val	Ile	Phe 125	Ile	Thr	Tyr
Val	11e 130	Ala	Gly	Val	Thr	Gly 135	Phe	Ile	Gly	Leu	Asp 140	Ile	Ile	Ala	Ser
Leu 145	Суз	Asn	Met	Ile	Met 150	Gly	Leu	Thr	Leu	Ile 155	Thr	Leu	Cys	Thr	Trp 160
Ala	Tyr	Ile	Arg	Tyr 165	Ser	Gly	Glu	Tyr	Arg 170	Glu	Leu	Gly	Ala	Val 175	Ile
Asp	Gln	Val	Ala 180	Ala	Ala	Leu	Trp	Asp 185	Gln	Ala	Leu	Tyr	Lys 190	Leu	Tyr
Ser	Ala	Ala 195	Ala	Thr	His	Arg	His 200	Leu	Tyr	His	Gln	Ala 205	Phe	Pro	Thr
Pro	Lys 210	Ser	Glu	Ser	Thr	Glu 215	Gln	Ser	Glu	Lys	Lys 220	Lys	Met		
-220															

<210> 1245

<211> 278

<212> PRT

<213> Homo sapiens

<400> 1245

Ser Ala Glu Asp Val Glu Phe Gln Lys Glu Val Ala Gln Val Arg Lys 1 $$ 5 $$ 10 $$ 15

1268

Arg	Ile	Thr	Gln 20	_	Lys	Lys	Gln	Glu 25		Leu	Thr	Pro	Gly 30		. Val
Tyr	Val	Arg 35		Leu	Pro	Asn	Leu 40		Asp	Glu	Thr	Gln 45		Phe	Ser
Tyr	Phe 50		Gln	Phe	Gly	Thr 55		Thr	Arg	Phe	Arg 60	Leu	Ser	Arg	Ser
Lys 65	Arg	Thr	Gly	Asn	Ser 70	-	Gly	Tyr	Ala	Phe 75		Glu	Phe	Glu	Ser 80
Glu	Asp	Val	Ala	Lys 85	Ile	Val	Ala	Glu	Thr 90		Asn	Asn	туг	Leu 95	Phe
Gly	Glu	Arg	Leu 100		Glu	Cys	His	Phe 105	Met	Pro	Pro	Glu	Lys 110		His
Lys	Glu	Leu 115		Lys	Asp	Trp	Asn 120	Ile	Pro	Phe	Lys	Gln 125	Pro	Ser	Tyr
Pro	Ser 130	Val	Lys	Arg	Tyr	Asn 135	Arg	Asn	Arg	Thr	Leu 140	Thr	Gln	Lys	Leu
Arg 145	Met	Glu	Glu	Arg	Phe 150	Lys	Lys	Lys	Glu	Arg 155	Leu	Leu	Arg	Lys	Lys 160
Leu	Ala	Lys	Lys	Gly 165	Ile	Asp	Tyr	Asp	Phe 170	Pro	Ser	Leu	Ile	Leu 175	Gln
Lys	Thr	Glu	Ser 180	Ile	Ser	Lys	Thr	Asn 185	Arg	Gln	Thr	Ser	Thr 190	Lys	Gly
Gln	Val	Leu 195	Arg	Lys	Lys	Lys	Lys 200	Lys	Val	Ser	Gly	Thr 205	Leu	Asp	Thr
Pro	Glu 210	ГÀЗ	Thr	Val	Asp	ser 215	Gln	Gly	Pro	Thr	Pro 220	Val	Суз	Thr	Pro
Thr 225	Phe	Leu	Glu	Arg	Arg 230	Lys	Ser	Gln	Val	Ala 235	Glu	Leu	Asn	Asp	Asp 240
Asp	Lys	Asp	Asp	Glu 245	Ile	Val	Phe	Lys	Gln 250	Pro	Ile	Ser	Cys	Val 255	Lys
Glu	Glu	Ile	Gln 260	Glu	Thr	Gln	Thr	Pro 265	Thr	His	Ser	Arg	Lys 270	Lys	Arg
220	λ ~~~	Cox	CAY	Agn	C1 n										

Arg Arg Ser Ser Asn Gln 275

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<210> 1246
 <211> 121
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (100)
<223> Xaa equals any of the naturally occurring L-amino acids
Ser Pro Pro Pro Leu Ser Leu Ile Leu Leu Ser Pro Ile Lys Ala Lys
                                   10
Tyr Gly Leu Thr Thr Ser Pro Lys Ser Val Leu Arg Pro Ser Leu Cys
            20
                           25
Leu Cys Ala Leu Leu Gly Val Ser Gln Arg Ser Gly Gln Asp Cys Ala
                           40
Gly Pro Ala Ser Pro Cys Ala Ser Gln Glu His Arg Gln Gly Val Leu
                        55
Val Ala Val Ala Gly His Leu Ser Pro Ser Ser Leu Leu Asn Val Leu
Thr Ala Arg Gly Asn Gly Val Ser Phe Pro Thr Lys Lys Pro Leu Leu
                                  90
Tyr Ile Phe Xaa Leu Gln Ser His Arg Leu Gln Thr Thr Leu Leu Phe
                105
Phe Met Asp Phe Ser Ala His Phe Arg
       115
<210> 1247
<211> 36
<212> PRT
<213> Homo sapiens
<400> 1247
Ile Phe His Arg Val Leu Leu Cys Asp Leu Asn Phe Ser Leu Gly Pro
                     10 15
```

Ala Ser Asp Ile Val Gly Gly Leu Ser Trp Phe Gln Glu Ile Arg Leu

Ala Phe Ser Ser 35

<210> 1248

<211> 184

<212> PRT

<213> Homo sapiens

<400> 1248

Trp Ile Pro Arg Ala Cys Arg Glu Phe Gly Thr Arg Phe Gly Gly Val 1 5 10 15

Thr Arg Gly Phe Asn Met Arg Ile Glu Lys Cys Tyr Phe Cys Ser Gly 20 25 30

Pro Ile Tyr Pro Gly His Gly Met Met Phe Val Arg Asn Asp Cys Lys 35 40 45

Val Phe Arg Phe Cys Lys Ser Lys Cys His Lys Asn Phe Lys Lys Lys 50 55 60

Arg Asn Pro Arg Lys Val Arg Trp Thr Lys Ala Phe Arg Lys Ala Ala
65 70 75 80

Gly Lys Glu Leu Thr Val Asp Asn Ser Phe Glu Phe Glu Lys Arg Arg 85 90 95

Asn Glu Pro Ile Lys Tyr Gln Arg Glu Leu Trp Asn Lys Thr Ile Asp

Ala Met Lys Arg Val Glu Glu Ile Lys Gln Lys Arg Gln Ala Lys Phe 115 120 125

Ile Met Asn Arg Leu Lys Lys Asn Lys Glu Leu Gln Lys Val Gln Asp

Ile Lys Glu Val Lys Gln Asn Ile His Leu Ile Arg Ala Pro Leu Ala 145 150 155 160

Gly Lys Gly Lys Gln Leu Glu Glu Lys Met Val Gln Gln Leu Gln Glu 165 170 175

Asp Val Asp Met Glu Asp Ala Pro 180

<210> 1249

<211> 188

	2> P 3> H	RT omo	sapi	ens											
<22	1> s 2> (104)	ana 1	g an	v of	+be	nat	ural	1 A	~~!! ~	ring	T_a	mino	201	1 0
			quai	s an	y OI	Cire	nac	ulal	IY O	CCui	11119	D-a:	штиф	acı	45
			Ala	His 5	Ser	Pro	Gly	Ser	Ala 10	Lys	Arg	Trp	Thr	Gln 15	Ala
Ala	Met	Ser	Arg 20	Pro	Arg	Met	Arg	Leu 25	Val	Val	Thr	Ala	Asp 30	Asp	Phe
Gly	Tyr	Cys 35	Pro	Arg	Arg	Asp	Glu 40	Gly	Ile	Val	Glu	Ala 45	Phe	Leu	Ala
Gly	Ala 50	Val	Thr	Ser	Val	Ser 55	Leu	Leu	Val	Asn	Gly 60	Ala	Ala	Thr	Glu
Ser 65	Ala	Ala	Glu	Leu	Ala 70	Arg	Arg	His	Ser	Ile 75	Pro	Thr	Gly	Leu	His 80
Ala	Asn	Leu	Ser	Glu 85	Gly	Arg	Pro	Val	Gly 90	Pro	Ala	Arg	Arg	Gly 95	Ala
Ser	Ser	Leu	Leu 100	Gly	Pro	Glu	Xaa	Phe 105	Phe	Leu	Gly	Lys	Met 110	Gly	Phe
Arg	Glu	Ala 115	Val	Ala	Ala	Gly	Asp 120	Val	Asp	Leu	Pro	G1n 125	Val	Arg	Ser
Arg	Ser 130	Tyr	Arg	Arg	Met	Leu 135	Ala	Arg	Thr	Pro	Arg 140	Ala	Pro	Pro	Gly
Gly 145	Thr	Val	Arg	Pro	Leu 150	Glu	Leu	Ala	Val	Asp 155	Asp	Phe	Arg	Ile	Gln 160
Thr	Leu	Glu	Pro	Ser 165	His	Gly	Ser	Thr	Arg 170	Arg	Val	Ser	Ser	Ala 175	Ala
Thr	Pro	Gly	Arg 180	ser	Arg	Cys	Leu	Ser 185	Leu	Ala	Leu				

<210> 1250 <211> 201 <212> PRT

<213> Homo sapiens

<220> <221> SITE <222> (36) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (96) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (97) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (101) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1250 Arg Lys Asn Leu Glu Ile Tyr Glu Ala Val Thr Ser Pro Gln Gly Pro Ala Met Thr Trp Ser Met Phe Ala Val Gly Trp Met Glu Leu Lys Asp Ala Cys Gly Xaa Arg Gly Leu Leu Asp Arg Ser Phe Ala Asn Met Ala 40 Glu Pro Phe Lys Val Trp Thr Glu Asn Ala Asp Gly Ser Gly Ala Val 55 Asn Phe Leu Thr Gly Met Gly Gly Phe Leu Gln Ala Val Val Phe Gly 65 Cys Thr Gly Phe Arg Val Ser Val Ser Gly Ile Phe Tyr Gln Gly Xaa Xaa Leu Asn Phe Xaa Phe Ser Glu Asp Ser Val Thr Val Glu Val Thr 100 Ala Arg Ala Gly Pro Trp Ala Pro His Leu Glu Ala Glu Leu Trp Pro 120 Ser Gln Ser Arg Leu Ser Leu Leu Pro Gly His Lys Val Ser Phe Pro 130 135 140 Arg Ser Ala Gly Arg Ile Gln Met Ser Pro Pro Lys Leu Pro Gly Ser 150 155 160

Ser Ser Ser Glu Phe Pro Gly Arg Thr Phe Ser Asp Val Arg Asp Pro 165 170 175

Leu Gln Ser Pro Leu Trp Val Thr Leu Gly Ser Ser Ser Pro Thr Glu
180 185 190

Ser Leu Thr Val Asp Pro Ala Ser Glu 195 200

<210> 1251

<211> 266

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (16)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1251

Ser Val Gly Ser Val Ala Ala Thr Arg Thr Gly Pro Val Ser Xaa 1 5 10 15

Lys Lys Phe Arg Glu Ala Ser Trp Arg Phe Thr Phe Tyr Leu Ile Ala $20 \hspace{1.5cm} 25 \hspace{1.5cm} 30$

Phe Ile Ala Gly Met Ala Val Ile Val Asp Lys Pro Trp Phe Tyr Asp 35 40 45

Met Lys Lys Val Trp Glu Gly Tyr Pro Ile Gln Ser Thr Ile Pro Ser 50 55 60

Gln Tyr Trp Tyr Tyr Met Ile Glu Leu Ser Phe Tyr Trp Ser Leu Leu 65 70 75 80

Phe Ser Ile Ala Ser Asp Val Lys Arg Lys Asp Phe Lys Glu Gln Ile 85 90 95

Ile His His Val Ala Thr Ile Ile Leu Ile Ser Phe Ser Trp Phe Ala 100 105 110

As Tyr Ile Arg Ala Gly Thr Leu Ile Met Ala Leu His Asp Ser Ser 115 120 125

Asp Tyr Leu Leu Glu Ser Ala Lys Met Phe Asn Tyr Ala Gly Trp Lys 130 135 140

Asn Thr Cys Asn Asn Ile Phe Ile Val Phe Ala Ile Val Phe Ile Ile

Thi	: Arg	Let	ı Val	11e		Pro	Phe	Trp	170		His	Cys	Thr	Leu 175	
Туг	Pro	Leu	180		Tyr	Pro	Ala	Phe 185		Gly	Туг	Tyr	Phe 190		Asn
Ser	Met	Met 195	_	Val	. Leu	Gln	Leu 200		His	Ile	Phe	Trp 205		Туг	Leu
Ile	210		Met	Ala	His	Lys 215		Ile	Thr	Gly	Lys 220		Val	Glu	Asp
Glu 225	Arg	Ser	Asp	Arg	Glu 230		Thr	Glu	Ser	Ser 235		Gly	Glu	Glu	Ala 240
Ala	Ala	Gly	Gly	Gly 245		Lys	Ser	Arg	Pro 250	Leu	Ala	Asn	Gly	His 255	Pro
Ile	Leu	Asn	Asn 260	Asn	His	Arg	Lys	Asn 265	Asp						
<21 <21	0> 1: 1> 1: 2> P: 3> H:	63 RT	sapid	ens											
	0> 1: Met		Thr	Asn 5	Lys	Суѕ	Ala	Ser	Gln 10	Ala	Gly	Met	Thr	Ala 15	туr
Gly	Thr	Arg	Arg 20	His	Leu	туг	Asp	Pro 25	Lys	Met	Gln	Thr	Asp 30	Lys	Pro
Phe	Asp	Gln 35	Thr	Thr	Ile	Ser	Leu 40	Gln	Met	Gly	Thr	Asn 45	Lys	Gly	Ala
Ser											_				
	Gln 50	Ala	Gly	Met	Leu	Ala 55	Pro	Gly	Thr	Arg	Arg 60	Asp	Ile	Tyr	Asp
Gln 65						55		_			60	_		_	
65	50	Leu	Thr	Leu	Gln 70	55 Pro	Val	Asp	Asn	Ser 75	60 Thr	Ile	Ser	Leu	Gln 80

Pro Val Ile His Asn Gly Ser Gln Gly Thr Gly Thr Asn Gly Ser Glu 120 Ile Ser Asp Ser Asp Tyr Gln Ala Glu Tyr Pro Asp Glu Tyr His Gly 135 Glu Tyr Gln Asp Asp Tyr Pro Arg Asp Tyr Gln Tyr Ser Asp Gln Gly 150 Ile Asp Tyr <210> 1253 <211> 298 <212> PRT <213> Homo sapiens Leu Glu Glu Thr Pro Cys Leu Arg Thr Ala Val Ala Cys Glu Gln Arg 5 Asp Pro Gly Thr Glu Ser Gln Pro Arg Arg Cys Cys Arg Arg Arg

<220> <221> SITE <222> (109) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1253 Pro Glu Thr Ala Glu Pro Val Arg Pro Pro Pro Pro Pro Thr Pro Asp Thr Glu His Pro Val Met Asp Lys Asn Glu Leu Val Gln Lys Ala Lys 55 Leu Ala Glu Gln Ala Glu Arg Tyr Asp Asp Met Ala Ala Cys Met Lys 70 75 Ser Val Thr Glu Gln Gly Ala Glu Leu Ser Asn Glu Glu Arg Asn Leu Leu Ser Val Ala Tyr Lys Asn Val Val Gly Ala Arg Xaa Ser Ser Trp 100 105 Arg Val Val Ser Ser Ile Glu Gln Lys Thr Glu Gly Ala Glu Lys Lys 120

Gln Gln Met Ala Arg Glu Tyr Arg Glu Lys Ile Glu Thr Glu Leu Arg

1276

140

135

Asp Ile Cys Asn Asp Val Leu Ser Leu Leu Glu Lys Phe Leu Ile Pro 150 155 Asn Ala Ser Gln Ala Glu Ser Lys Val Phe Tyr Leu Lys Met Lys Gly 170 Asp Tyr Tyr Arg Tyr Leu Ala Glu Val Ala Ala Gly Asp Asp Lys Lys Gly Ile Val Asp Gln Ser Gln Gln Ala Tyr Gln Glu Ala Phe Glu Ile 200 Ser Lys Lys Glu Met Gln Pro Thr His Pro Ile Arg Leu Gly Leu Ala 210 215 220 Leu Asn Phe Ser Val Phe Tyr Tyr Glu Ile Leu Asn Ser Pro Glu Lys 230 Ala Cys Ser Leu Ala Lys Thr Ala Phe Asp Glu Ala Ile Ala Glu Leu 245 250 Asp Thr Leu Ser Glu Glu Ser Tyr Lys Asp Ser Thr Leu Ile Met Gln 265 Leu Leu Arg Asp Asn Leu Thr Leu Trp Thr Ser Asp Thr Gln Gly Asp 280 Glu Ala Glu Ala Gly Glu Gly Glu Asn 290 295 <210> 1254 <211> 173 <212> PRT <213> Homo sapiens <400> 1254 Ser Pro Ala Arg Pro Leu Ile Arg Ser Asp Lys Met Lys Glu Thr Ile 10 Met Asn Gln Glu Lys Leu Ala Lys Leu Gln Ala Gln Val Arg Ile Gly

Gly Lys Gly Thr Ala Arg Arg Lys Lys Lys Val Val His Arg Thr Ala

Thr Ala Asp Asp Lys Lys Leu Gln Phe Ser Leu Lys Lys Leu Gly Val

40

55

 Asn Asn Ile
 Ser Gly
 Ile Glu
 Glu
 Val
 Asn Met
 Phe
 Thr
 Asn Gln
 Gly
 80

 Thr
 Val
 Ile
 His
 Phe
 Asn Asn Pro
 Lys
 Val
 Gln
 Ala
 Ser
 Leu
 Ala
 Ala
 Ala
 95
 Asn
 Glu
 Thr
 Gln
 Leu
 Thr
 Glu
 Glu
 Thr
 Glu
 Thr

100 105 110

Met Leu Pro Ser Ile Leu Asn Gln Leu Gly Ala Asp Ser Leu Thr Ser 115 120 125

Leu Arg Arg Leu Ala Glu Ala Leu Pro Lys Gln Ser Val Asp Gly Lys 130 135 140

Val Glu Asn Phe Asp Glu Ala Ser Lys Asn Glu Ala Asn 165 170

<210> 1255

<211> 66

<212> PRT

<213> Homo sapiens

<400> 1255

Leu Cys Cys Pro Phe His Ile Lys Glu Leu Leu Thr Thr Lys Ala Ala 1 5 10 15

Pro Ala Phe Pro Ile Cys Leu Ser Ile Trp Leu Ala Gly Lys Glu Arg 20 25 30

Thr Cys Met Leu Val Lys Glu Glu Val Gly Trp Lys Lys Trp Gly Gly 35 40 45

Thr Thr Val Lys Ser Arg Val Lys Pro Ser Trp Pro Lys Val Ser Cys 50 55 60

Arg Leu

65

<210> 1256

<211> 389

<212> PRT

<213> Homo sapiens

<40	0> 1	256													
Ala 1	Glu	Ala	Gly	Pro 5	_	Ala	Arg	Ala	Ala 10		Ala	Met	Ala	11e	Lys
Phe	Leu	Glu	Val 20	Ile	Lys	Pro	Phe	Cys 25	Val	Ile	Leu	Pro	Glu 30		Gln
Lys	Pro	Glu 35	Arg	Lys	Ile	Gln	Phe 40	Lys	Glu	Lys	Val	Leu 45		Thr	Ala
Ile	Thr 50	Leu	Phe	Ile	Phe	Leu 55	Val	Cys	Cys	Gln	Ile 60		Leu	Phe	Gly
Ile 65	Met	Ser	Ser	Asp	Ser 70	Ala	Asp	Pro	Phe	Tyr 75	Trp	Met	Arg	Val	Ile 80
Leu	Ala	Ser	Asn	Arg 85	Gly	Thr	Leu	Met	Glu 90	Leu	Gly	Ile	Ser	Pro 95	Ile
Val	Thr	Ser	Gly 100	Leu	Ile	Met	Gln	Leu 105	Leu	Ala	Gly	Ala	Lys 110		Ile
Glu	Val	Gly 115	Asp	Thr	Pro	Lys	Asp 120	Arg	Ala	Leu	Phe	Asn 125	Gly	Ala	Gln
Lys	Leu 130	Phe	Gly	Met	Ile	11e 135	Thr	Ile	Gly	Gln	Ser 140	Ile	Val	Tyr	Val
Met 145	Thr	Gly	Met	Tyr	Gly 150	Asp	Pro	Ser	Glu	Met 155	Gly	Ala	Gly	Ile	Cys 160
Leu	Leu	Ile	Thr	11e 165	Gln	Leu	Phe	Val	Ala 170	Gly	Leu	Ile	Val	Leu 175	Leu
Leu	Asp	Glu	Leu 180	Leu	Gln	Lys	Gly	Tyr 185	Gly	Leu	Gly	Ser	Gly 190	Ile	Ser
Leu	Phe	11e 195	Ala	Thr	Asn	Ile	Cys 200	Glu	Thr	Ile	Val	Trp 205	Lys	Ala	Phe
Ser	Pro 210	Thr	Thr	Val	Asn	Thr 215	Gly	Arg	Gly	Met	Glu 220	Phe	Glu	Gly	Ala
Ile 225	Ile	Ala	Leu	Phe	His 230	Leu	Leu	Ala		Arg 235	Thr	Asp	Lys	Val	Arg 240
Ala	Leu	Arg	Glu	Ala 245	Phe	Tyr	Arg	Gln	Asn 250	Leu	Pro	Asn	Leu	Met 255	Asn
Leu	Ile	Ala	Thr	Ile	Phe	Val	Phe	Ala	Val	Val	Ile	Tyr	Phe	Gln	Gly

1279

260 265 270 Phe Arg Val Asp Leu Pro Ile Lys Ser Ala Arg Tyr Arg Gly Gln Tyr 280 Asn Thr Tyr Pro Ile Lys Leu Phe Tyr Thr Ser Asn Ile Pro Ile Ile Leu Gln Ser Ala Leu Val Ser Asn Leu Tyr Val Ile Ser Gln Met Leu 305 310 315 Ser Ala Arg Phe Ser Gly Asn Leu Leu Val Ser Leu Leu Gly Thr Trp 330 Ser Asp Thr Ser Ser Gly Gly Pro Ala Arg Ala Tyr Pro Val Gly Gly 340 345 Leu Cys Tyr Tyr Leu Ser Pro Pro Trp Ser Met Asn Ser Thr Gly Thr 360 Ser Pro Gln Pro Arg Pro Leu Val Gly Cys Ala Ser Gly Pro Ser Arg Ser Trp Leu Thr Ser 385 <210> 1257 <211> 191 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (2) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1257 Gly Xaa Pro Ser Ser Ser Arg Ala His Ser Pro Met Ile Ala Val Gly 10 Ser Asp Asp Ser Ser Pro Asn Ala Met Ala Lys Val Gln Ile Phe Glu 20 25 Tyr Asn Glu Asn Thr Arg Lys Tyr Ala Lys Ala Glu Thr Leu Met Thr 40 Val Thr Asp Pro Val His Asp Ile Ala Phe Ala Pro Asn Leu Gly Arg 55

Ser 65		His	Ile	Leu	Ala 70		: Ala	Thr	Lys	Asp 75		Arg	Ile	Phe	Thr 80
Leu	Lys	Pro	Val	Arg 85	_	Glu	Leu	Thr	Ser 90		Gly	Gly	Pro	Thr 95	-
Phe	Glu	Ile	His 100	Ile	Val	Ala	Gln	Phe 105	Asp	Asn	His	Asn	Ser 110		Val
Trp	Arg	Val 115		Trp	Asn	Ile	Thr 120		Thr	Val	Leu	Ala 125		Ser	Gly
Asp	Asp 130	_	Cys	Val	Arg	Leu 135	_	Lys	Ala	Asn	Туг 140		Asp	Asn	Trp
Lys 145	Cys	Thr	Gly	Ile	Leu 150	Lys	Gly	Asn	Gly	Ser 155	Pro	Val	Asn	Gly	Ser 160
Ser	Gln	Gln	Gly	Thr 165	Ser	Asn	Pro	Ser	Leu 170	Gly	Ser	Asn	Ile	Pro 175	Ser
Leu	Gln	Asn	Ser 180	Leu	Asn	Gly	Ser	Ser 185	Ala	Gly	Arg	Lys	His 190	Ser	
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			sapi	ens											
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/al	Ser	Cys	Glu 20	Asn	Ser	Pro	Ser	Asp 25	Thr	Ser	Ser	Val	Ala 30	Val	Gly
Cys	Leu	Ala 35	Gln	Asp	Phe	Leu	Pro 40	Asp	Ser	Ile	Thr	Phe 45	Ser	Trp	Lys
Tyr	Lys 50	Asn	Asn	Ser	Asp	Ile 55	Ser	Ser	Thr	Arg	Gly 60	Phe	Pro	Ser	Val
65	Arg	Gly	Gly	Lys	Tyr 70	Ala	Ala	Thr	Ser	Gln 75	Val	Leu	Leu	Pro	Ser 80
***	700	17-3	Mak	O1-	<i>~</i> 1	m1	3	c1		**- 7	**- 7	a	T	1	~ 1~

His Pro Asn Gly Asn Lys Glu Lys Asn Val Pro Leu Pro Val Ile Ala

WO 00/55350

			100					105					110		
Glu	Leu	Pro		Lys	Val	ser	Val 120	Phe	Val	Pro	Pro	Arg 125	Asp	Gly	Phe
Phe	Gly 130		Pro	Arg	Lys	Ser 135	Lys	Leu	Ile	Суз	Gln 140	Ala	Thr	Gly	Phe
Ser 145		Arg	Gln	Ile	Gln 150	Val	Ser	Trp	Leu	Arg 155		Gly	Lys	Gln	Val 160
Gly	Ser	Gly	Val	Thr 165	Thr	Asp	Gln	Val	Gln 170		Glu	Ala	Lys	Glu 175	Ser
Gly	Pro	Thr	Thr 180	_	Lys	Val	Thr	Ser 185		Leu	Thr	Ile	Lys 190	Glu	Ser
Asp	Trp	Leu 195	Ser	Gln	Ser	Met	Phe 200	Thr	Cys	Arg	Val	Asp 205	His	Arg	Gly
Leu	Thr 210	Phe	Gln	Gln	Asn	Ala 215	Ser	Ser	Met	Cys	Val 220	Pro	Asp	Gln	Asp
Thr 225	Ala	Ile	Arg	Val	Phe 230	Ala	Ile	Pro	Pro	Ser 235	Phe	Ala	Ser	Ile	
Leu	Thr	Lys	Ser	Thr 245	Lys	Leu	Thr	Cys	Leu 250	Val	Thr	Asp	Leu	Thr 255	Thr
Tyr	Asp	Ser	Val 260	Thr	Ile	Ser	Trp	Thr 265	Arg	Gln	Asn	Gly	Glu 270	Ala	Val
Lys	Thr	His 275	Thr	Asn	Ile	Ser	Glu 280	Ser	His	Pro	Asn	Ala 285	Thr	Phe	Ser
Ala	Val 290	Gly	Glu	Ala	Ser	Ile 295	Суѕ	Glu	Asp	Asp	Trp 300	Asn	Ser	Gly	Glu
Arg 305	Phe	Thr	Сув	Thr	Val 310	Thr	His	Thr	Asp	Leu 315	Pro	Ser	Pro	Leu	Lys 320
Gln	Thr	Ile	Ser	Arg 325	Pro	Lys	Gly	Val	Ala 330	Leu	His	Arg	Pro	Asp 335	Val
Tyr	Leu	Leu	Pro 340	Pro	Ala	Arg	Glu	Gln 345	Leu	Asn	Leu	Arg	Glu 350	Ser	Ala
Thr	Ile	Thr 355	Cys	Leu	Val	Thr	Gly 360	Phe	Ser	Pro	Ala	Asp 365	Val	Phe	Val
Gln	Trp	Met	Gln	Arg	Gly	Gln	Pro	Leu	Ser	Pro	Glu	Lys	Tyr	Val	Thr

370 375 380 Ser Ala Pro Met Pro Glu Pro Gln Ala Pro Gly Arg Tyr Phe Ala His 385 390 395 Ser Ile Leu Thr Val Ser Glu Glu Glu Trp Asn Thr Gly Glu Thr Tyr 410 Thr Cys Val Val Ala His Glu Ala Leu Pro Asn Arg Val Thr Glu Arg 420 425 Thr Val Asp Lys Ser Thr Gly Lys Pro Thr Leu Tyr Asn Val Ser Leu Val Met Ser Asp Thr Ala Gly Thr Cys Tyr 455 <210> 1259 <211> 247 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (25) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1259 Ala Gly Pro Ala Pro Glu Glu Pro Arg Gly Gly Ala Ala Ala Arg Trp Asp Cys Gln Pro Cys Gln Ala Ala Xaa Val Val Glu Asn Ser Ala Gln 25 Arg Val Ile His Leu Ala Gly Gln Trp Glu Lys His Arg Val Pro Leu 40 Leu Ala Glu Tyr Arg His Leu Arg Lys Leu Gln Asp Cys Arg Glu Leu 55 Glu Ser Ser Arg Arg Leu Ala Glu Ile Gln Glu Leu His Gln Ser Val Arg Ala Ala Glu Glu Ala Arg Arg Lys Glu Glu Val Tyr Lys Gln 90 Leu Met Ser Glu Leu Glu Thr Leu Pro Arg Asp Val Ser Arg Leu Ala

105

Tyr Thr Gln Arg Ile Leu Glu Ile Val Gly Asn Ile Arg Lys Gln Lys 115 120 125

Glu Glu Ile Thr Lys Ile Leu Ser Asp Thr Lys Glu Leu Gln Lys Glu 130 135 140

Ile Asn Ser Leu Ser Gly Lys Leu Asp Arg Thr Phe Ala Val Thr Asp 145 150 155 160

Glu Leu Val Phe Lys Asp Ala Lys Lys Asp Asp Ala Val Arg Lys Ala 165 170 175

Tyr Lys Tyr Leu Ala Ala Leu His Glu Asn Cys Ser Gln Leu Ile Gln 180 185 190

Thr Ile Glu Asp Thr Gly Thr Ile Met Arg Glu Val Arg Asp Leu Glu
195 200 205

Glu Gln Ile Glu Thr Glu Leu Gly Lys Lys Thr Leu Ser Asn Leu Glu 210 215 220

Lys Ile Arg Glu Asp Tyr Arg Ala Leu Arg Gln Glu Asn Ala Gly Leu 225 230 235 240

Leu Gly Arg Val Arg Glu Ala 245

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<212> PRT

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Phe Ala Ser Asp Arg Tyr Leu Phe Val Ile Arg Arg Val Ala Ser Phe 20 25 30

His Leu Gly Ala Glu Asn Ser Arg Gln Leu Leu Thr Asp Lys Phe Asn 35 40 45

Leu His Leu Gln Tyr Cys Met Leu Gly Ile Ser Ala Tyr Phe 50 60

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<211> 243

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1		3		5			,2		10					15	-1-
Gly	Pro	Pro	Val 20	_	Pro	Trp	Arg	Asp 25	-	Pro	Gln	Ser	Ser 30	Ile	Туг
Asp	Pro	Phe 35		Gly	Met	Lys	Thr 40	Pro	Gly	Gln	Arg	Gln 45	Leu	Ile	Thr
Leu	Gln 50	Glu	Gln	Val	Lys	Leu 55	Gly	Ile	Val	Asn	Val 60	Asp	Glu	Ala	Val
Leu 65	His	Phe	Lys	Glu	Trp 70	Gln	Leu	Asn	Gln	Lys 75	Xaa	Arg	Ser	Glu	Ser 80
Phe	Arg	Phe	Gln	Gln 85	Glu	Asn	Leu	Lys	Arg 90	Leu	Arg	Asp	Ser	Ile 95	Thr
Arg	Arg	Gln	Arg 100	Glu	Lys	Gln	Lys	Ser 105	Gly	Lys	Gln	Thr	Asp 110	Leu	Glu
Ile	Thr	Val 115	Pro	Ile	Arg	His	Ser 120	Gln	His	Leu	Pro	Ala 125	Lys	Val	Glu
Phe	Gly 130	Val	Tyr	Glu	Ser	Gly 135	Pro	Arg	Lys	Ser	Val 140	Ile	Pro	Pro	Arg
Thr 145	Glu	Leu	Arg	Arg	Gly 150	Asp	Trp	Lys	Thr	Asp 155	Ser	Thr	Ser	Ser	Thr 160
Ala	Ser	Ser	Thr	Ser 165	Asn	Arg	Ser	Ser	Thr 170	Arg	Ser	Leu	Leu	Ser 175	Val

Ser Ser Gly Met Glu Gly Asp Asn Glu Asp Asn Glu Val Pro Glu Val 185 Thr Arg Ser Arg Ser Pro Gly Pro Pro Gln Val Asp Gly Thr Pro Thr 205 195 200 Met Xaa Leu Glu Arg Pro Pro Arg Val Pro Pro Arg Ala Ala Ser Gln 215 Arg Xaa Pro Thr Arg Glu Thr Phe His Pro Pro Pro Pro Val Pro Pro 225 230 235 Arg Gly Arg <210> 1262 <211> 75 <212> PRT <213> Homo sapiens <400> 1262

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Lys Tyr Val Arg Asn Asp Gln Asn Lys Arg Lys Phe Leu Phe Ser Cys

Lys Tyr Phe Ser Ser Val Ile Thr Leu Lys Tyr Lys Leu Lys Tyr Asn 20 25 30

Ile Glu Lys Lys Leu Ser Thr His Leu Val Phe Gln Glu Asn Leu Lys 50 60

Arg Ser Gln Gly Lys Met Ile Cys Met Leu Lys 65 70 75

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<213> Homo sapiens

<220>

<221> SITE

<222> (249)

<223> Xaa equals any of the naturally occurring L-amino acids

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Arg	Cys	Arg	Ala 20	Glu	Ala	Ala	Ala	Ala 25	Val	Gly	Thr	Ala	Arg 30	Ser	Pro
Ala	Leu	Gly 35	Met	Ala	Leu	Leu	Val 40	Leu	Gly	Leu	Val	Ser 45	Cys	Thr	Phe
Phe	Leu 50		Val	Asn	Gly	Leu 55	Tyr	Ser	ser	Ser	Asp 60	Asp	Val	Ile	Glu
Leu 65	Thr	Pro	Ser	Asn	Phe 70	Asn	Arg	Glu	Val	Ile 75		Ser	Asp	Ser	Let 80
Trp	Leu	Val	Glu	Phe 85	Tyr	Ala	Pro	Trp	Cys 90	Gly	His	Cys	Gln	Arg 95	Let
Thr	Pro	Glu	Trp 100	Lys	Lys	Ala	Ala	Thr 105	Ala	Leu	Lys	Asp	Val 110	Val	Lys
Val	Gly	Ala 115	Val	Asp	Ala	Asp	Lys 120	His	His	Ser	Leu	Gly 125	Gly	Gln	ТУІ
Gly	Val 130	Gln	Gly	Phe	Pro	Thr 135	Ile	Lys	Ile	Phe	Gly 140	Ser	Asn	Lys	Asr
Arg 145	Pro	Glu	Asp	Tyr	Gln 150	Gly	Gly	Arg	Thr	Gly 155	Glu	Ala	Ile	Val	Asp 160
Ala	Ala	Leu	Ser	Ala 165	Leu	Arg	Gln	Leu	Val 170	Lys	Asp	Arg	Leu	Gly 175	Gly
Arg	Ser	Gly	Gly 180	Tyr	Ser	Ser	Gly	Lys 185	Gln	Gly	Arg	Ser	Asp 190	Ser	Ser
Ser	Lys	Lys 195	Asp	Val	Ile	Glu	Leu 200	Thr	Asp	Asp	Ser	Phe 205	Asp	Lys	Asn
7al	Leu 210	Asp	Ser	Glu	Asp	Val 215	Trp	Met	Val	Glu	Phe 220	Tyr	Ala	Pro	Trp
225	Gly	His	Cys	Lys	Asn 230	Leu	Glu	Pro	Glu	Trp 235	Ala	Ala	Ala	Ala	Ser 240
Slu	Val	Lys	Glu	Gln 245	Thr	Lys	Gly	Xaa	Val 250	Lys	Leu	Ala	Ala	Val 255	Asp
la	Thr	Val	Asn 260	Gln	Val	Leu	Ala	Ser 265	Arg	Tyr	Gly	Ile	Arg 270	Gly	Phe

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Pro Thr Ile Lys Ile Phe Gln Lys Gly Glu Ser Pro Val Asp Tyr Asp 280 Gly Gly Arg Thr Arg Ser Asp Ile Val Ser Arg Ala Leu Asp Leu Phe 290 295 300 Ser Asp Asn Ala Pro Pro Pro Glu Leu Leu Glu Ile Ile Asn Glu Asp 315 Ile Ala Lys Arg Thr Cys Glu Glu His Gln Leu Cys Val Val Ala Val Leu Pro His Ile Leu Asp Thr Gly Ala Ala Gly Arg Asn Ser Tyr Leu 345 Glu Val Leu Leu Lys Leu Ala Asp Lys Tyr Lys Lys Lys Met Trp Gly 360 Trp Leu Trp Thr Glu Ala Gly Ala Gln Ser Glu Leu Glu Thr Ala Leu 375 Gly Ile Gly Gly Phe Gly Tyr Pro Ala Met Ala Ala Ile Asn Ala Arg Lys Met Lys Phe Ala Leu Leu Lys Gly Ser Phe Ser Glu Gln Gly Ile Asn Glu Phe Leu Arg Glu Leu Ser Phe Gly Arg Gly Ser Thr Ala Pro 420 425 Val Gly Gly Gly Ala Phe Pro Thr Ile Val Glu Arg Glu Pro Trp Asp . 440 Gly Arg Asp Gly Glu Leu Pro Val Glu Asp Asp Ile Asp Leu Ser Asp 450 455 Val Glu Leu Asp Asp Leu Gly Lys Asp Glu Leu 470 <210> 1264 <211> 398 <212> PRT

<223> Xaa equals any of the naturally occurring L-amino acids

<213> Homo sapiens

<220>
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<222> (28)

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Ala	Ala	Gly 35		Ile	Ser	Ala	Tyr 40	_	Pro	Gly	Leu	Val		Ile	Ala
Val	Val	. Gln	Asp	Gly	Asp	Gly 55		Arg	Glu	Val	Arg 60		Pro	Thr	Lys
Ala 65		His	Leu	Gln	Leu 70		Glu	Gly	Lys	Ser 75		His	Glu	Thr	Leu 80
Asn	Ile	· Val	Glu	G1u 85	-	Lys	Arg	Ala	Glu 90	Val	Gly	Lys	Asp	Glu 95	_
Val	Ile	Thr	Glu 100		Met	Asn	Gly	Lys 105	Glu	Ile	Ser	Pro	Gly 110		Gly
Pro	Gly	Glu 115		Arg	Lys	Val	Glu 120	Pro	Val	Thr	Gln	Lys 125	_	Ser	Thr
Ser	Leu 130	Ser	Ser	Glu	Ser	Ser 135	Ser	Ser	Ser	Ser	Glu 140	Ser	Glu	Glu	Glu
Asp 145	Val	Gly	Glu	Tyr	Arg 150	Pro	His	His	Arg	Val 155	Thr	Glu	Gly	Thr	Ile 160
Arg	Gl u	Glu	Gln	Glu 165	Tyr	Glu	Glu	Glu	Val 170	Glu	Glu	Glu	Pro	Arg 175	Pro
Ala	Ala	Lys	Val 180	Val	Glu	Arg	Glu	G1u 185	Ala	Val	Pro	Glu	Ala 190	Ser	Pro
Val	Thr	Gln 195	Ala	Gly	Ala	Ser	Val 200	Ile	Thr	Val	Glu	Thr 205	Val	Ile	Gln
Glu	Asn 210	Val	Gly	Ala	Gln	Lys 215	Ile	Pro	Gly	Glu	Lys 220	Ser	Val	His	Glu
Gly 225	Ala	Leu	Lys	Gln	Asp 230	Met	Gly	Glu	Glu	Ala 235	Glu	Glu	Glu	Pro	Gln 240
Lys	Val	Asn	Gly	Glu 245	Val	Ser	His	Val	Asp 250	Ile	Asp	Val	Leu	Pro 255	Gln
Ile	Ile	Cys	Cys	Ser	Glu	Pro	Pro	Val	Val	Lys	Thr	Glu	Met	Val	Thr

1289

270

265

260

Ile Ser Asp Ala Ser Gln Arg Thr Glu Ile Ser Thr Lys Glu Val Pro 275 280 285 Ile Val Gln Thr Glu Thr Lys Thr Ile Thr Tyr Glu Ser Pro Gln Ile 295 Asp Gly Gly Ala Gly Gly Asp Ser Gly Thr Leu Leu Thr Ala Gln Thr 310 Ile Thr Ser Glu Ser Val Ser Thr Thr Thr Thr His Ile Thr Lys Thr Val Lys Gly Gly Ile Ser Glu Thr Arg Ile Glu Lys Arg Ile Val 345 Ile Thr Gly Asp Gly Asp Ile Asp His Asp Gln Ala Leu Ala Gln Ala 360 Ile Arg Glu Ala Arg Glu Gln His Pro Asp Met Ser Val Thr Arg Val 375 Val Val His Lys Glu Thr Glu Leu Ala Glu Glu Gly Glu Asp 390 <210> 1265 <211> 207 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (99) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1265 Trp Thr Gly Thr Gly Arg Gly Ala Val Ala Ile Met Ala Asp Pro Asp Pro Arg Tyr Pro Arg Ser Ser Ile Glu Asp Asp Phe Asn Tyr Gly Ser Ser Val Ala Ser Ala Thr Val His Ile Arg Met Ala Phe Leu Arg Lys Val Tyr Ser Ile Leu Ser Leu Gln Val Leu Leu Thr Thr Val Thr Ser 50 55

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1290

Thr Val Phe Leu Tyr Phe Glu Ser Val Arg Thr Phe Val His Glu Ser 75 70 65 Pro Ala Leu Ile Leu Leu Phe Ala Leu Gly Ser Leu Gly Leu Ile Phe 851 90 Ala Leu Xaa Leu Asn Arg His Lys Tyr Pro Leu Asn Leu Tyr Leu Leu 105 Phe Gly Phe Thr Leu Leu Glu Ala Leu Thr Val Ala Val Val Thr Phe Tyr Asp Val Tyr Ile Ile Leu Gln Ala Phe Ile Leu Thr Thr 135 Val Phe Phe Gly Leu Thr Val Tyr Thr Leu Gln Ser Lys Lys Asp Phe 150 155 Ser Lys Phe Gly Ala Gly Leu Phe Ala Leu Leu Trp Ile Leu Cys Leu 165 170 Ser Gly Phe Leu Lys Phe Phe Phe Tyr Ser Glu Ile Met Glu Leu Val 185 Leu Ala Ala Ala Gly Ala Leu Leu Phe Trp Gly Ile His His Leu 200 <210> 1266 <211> 289 <212> PRT <213> Homo sapiens

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Glu Arg Ser Ile His Asp Phe Cys Leu Val Ser Lys Val Val Gly Arg

Cys Arg Ala Ser Met Pro Arg Trp Trp Tyr Asn Val Thr Asp Gly Ser

Cys Gln Leu Phe Val Tyr Gly Gly Cys Asp Gly Asn Ser Asn Asn Tyr

90 95 85 Leu Thr Lys Glu Glu Cys Leu Lys Lys Cys Ala Thr Val Thr Glu Asn Ala Thr Gly Asp Leu Ala Thr Ser Arg Asn Ala Ala Asp Ser Ser Val Pro Ser Ala Pro Arg Arg Gln Asp Ser Glu Asp His Ser Ser Asp Met 135 Phe Asn Tyr Glu Glu Tyr Cys Thr Ala Asn Ala Val Thr Gly Pro Cys 155 150 Arg Ala Ser Phe Pro Arg Trp Tyr Phe Asp Val Glu Arg Asn Ser Cys Asn Asn Phe Ile Tyr Gly Gly Cys Arg Gly Asn Lys Asn Ser Tyr Arg 185 Ser Glu Glu Ala Cys Met Leu Arg Cys Phe Arg Gln Gln Glu Asn Pro 200 Pro Leu Pro Leu Gly Ser Lys Val Val Leu Ala Gly Leu Phe Val Met Val Leu Ile Leu Phe Leu Gly Ala Ser Met Val Tyr Leu Ile Arg 225 230 235 Val Ala Arg Arg Asn Gln Glu Arg Ala Leu Arg Thr Val Trp Ser Ser 250 Gly Asp Asp Lys Glu Gln Leu Val Lys Asn Thr Tyr Val Leu Cys Arg 265 260 Pro Val Ala Lys Arg Thr Gly Glu Gly Arg Gly Asp Met Cys Asp Phe 280

Phe

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<211> 284

<212> PRT

<213> Homo sapiens

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Glv	Met	Glv	Ara	Val	Gln	Leu	Phe	Glu	Ile	Ser	Len	Ser	His	Glv	Arg
~-1		1	20					25					30	4	
_	_					_			_			_			_
Val	Val	Tyr 35		Pro	Gly	Glu	Pro 40	Leu	Ala	Gly	Thr	Val 45	Arg	Val	Arg
		3.7					40					45			
Leu	Gly	Ala	Pro	Leu	Pro	Phe	Arg	Ala	Ile	Arg	Val	Thr	Cys	Ile	Gly
	50					55					60				
Ser	Cvs	Glv	Val	Ser	Asn	Lvs	Ala	Asn	Asp	Thr	Ala	Trp	Val	Val	Glu
65	-1-	1			70	-1-				75					80
										_ •	_	_		_	_
Glu	Gly	Tyr	Phe	Asn 85	Ser	Ser	Leu	ser	Leu 90	Ala	Asp	Lys	GTÄ	Ser 95	Leu
				0.5					50					,,	
Pro	Ala	Gly	Glu	His	Ser	Phe	Pro	Phe	Gln	Phe	Leu	Leu	Pro	Ala	Thr
			100					105					110		
Ala	Pro	Thr	Ser	Phe	Glu	Glv	Pro	Phe	Glv	Lvs	Ile	Val	His	Gln	Val
		115			014	013	120			-,-		125			
Arg		Ala	Ile	His	Thr	Pro 135	Arg	Phe	Ser	Lys	Asp 140	His	Lys	Cys	Ser
	130					133					140				
Leu	Val	Phe	Tyr	Ile	Leu	ser	Pro	Leu	Asn	Leu	Asn	Ser	Ile	Pro	Asp
145					150					155					160
Ile	Glu	Gln	Pro	Asn	Va I	Ala	Ser	λla	Thr	Lvs	Lvs	Phe	Ser	Tvr	ĭ.vs
	-14			165			-		170	-,-	-1-			175	~,~
Leu	Val	Lys	Thr	Gly	Ser	Val	Val		Thr	Ala	Ser	Thr	_	Leu	Arg
			180					185					190		
Gly	Tyr	Val	Val	Gly	Gln	Ala	Leu	Gln	Leu	His	Ala	Asp	Val	Glu	Asn
		195					200					205			
Glr	Ser	G] 11	Lys) er	mhr	Sar	Dro	V2.1	17 m 1	Δla	Ser	T.e.i	T.413	Gln	Tuc
3111	210	GTÅ	ъÃр	vah	TIIT	215	£ 1.0	*ar	4 CL T	nia	220	Ju	wen	3111	⊷y s
Val	Ser	Tyr	Lys	Ala	Lys	Arg	Trp	Ile	His	Asp	Val	Arg	Thr	Ile	Ala

1293

225 230 235 240 Glu Val Glu Gly Ala Gly Val Lys Ala Trp Arg Arg Ala Gln Trp His 250 245 Glu Gln Ile Leu Val Pro Ala Leu Pro Gln Ser Ala Leu Pro Ala Ala 265 Ala Ser Ser Thr Ser Thr Thr Thr Tyr Arg Ser Leu 275 280 <210> 1268 <211> 254 <212> PRT <213> Homo sapiens <400> 1268 Val Trp Leu Arg Val Glu Asn Val Cys Gln Gly Pro Gly Gln Glu Gly Gly Pro Pro Val Thr Met Val Ser Met Ser Phe Lys Arg Asn Arg Ser 25 Asp Arg Phe Tyr Ser Thr Arg Cys Cys Gly Cys Cys His Val Arg Thr 40 Gly Thr Ile Ile Leu Gly Thr Trp Tyr Met Val Val Asn Leu Leu Met 55 Ala Ile Leu Leu Thr Val Glu Val Thr His Pro Asn Ser Met Pro Ala Val Asn Ile Gln Tyr Glu Val Ile Gly Asn Tyr Tyr Ser Ser Glu Arg 85 Met Ala Asp Asn Ala Cys Val Leu Phe Ala Val Ser Val Leu Met Phe 105 Ile Ile Ser Ser Met Leu Val Tyr Gly Ala Ile Ser Tyr Gln Val Gly 115 120 Trp Leu Ile Pro Phe Phe Cys Tyr Arg Leu Phe Asp Phe Val Leu Ser 135 Cys Leu Val Ala Ile Ser Ser Leu Thr Tyr Leu Pro Arg Ile Lys Glu 145 150 155 Tyr Leu Asp Gln Leu Pro Asp Phe Pro Tyr Lys Asp Asp Leu Leu Ala

1294

Leu Asp Ser Ser Cys Leu Leu Phe Ile Val Leu Val Phe Phe Ala Leu Phe Ile Ile Phe Lys Ala Tyr Leu Ile Asn Cys Val Trp Asn Cys Tyr 195 200 205 Lys Tyr Ile Asn Asn Arg Asn Val Pro Glu Ile Ala Val Tyr Pro Ala 215 Phe Glu Ala Pro Pro Gln Tyr Val Leu Pro Thr Tyr Glu Met Ala Val 225 235 230 Lys Met Pro Glu Lys Glu Pro Pro Pro Pro Tyr Leu Pro Ala 250 245 <210> 1269 <211> 67 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (17) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (49) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (52) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (53) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1269 Lys Ser Ile Leu Val Ile Arg Val Tyr Phe Phe Tyr Arg Thr Arg Trp 5 10 Xaa Gly Gly Glu Pro Phe Thr Leu Leu Val Lys Leu Asn His Arg Lys 25

Phe Thr Ile Cys Leu Ser Gln Thr Leu Ala Val Arg Gly Met Val Ala

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45
         35
                              40
Xaa Ala Cys Xaa Xaa Pro Ala Cys Trp Gly Gly Pro Ser Trp Gly Gly
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     50
                                              60
Leu Pro Glu
 65
<210> 1270
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<400> 1270
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Gly Ser Pro Gly Thr Xaa Arg Ile Pro Xaa Thr Arg Xaa Glu Thr Cys 15

Phe Asp Lys Tyr Thr Gly Asn Thr Tyr Arg Val Gly Asp Thr Tyr Glu 30

Arg Pro Lys Asp Ser Met Ile Trp Asp Cys Thr Cys Ile Gly Ala Gly 45

Arg Gly Arg Ile Ser Cys Thr Ile Ala Asn Arg Cys His Glu Gly Gly 55

Gln Ser Tyr Lys Ile Gly Asp Thr Trp Arg Arg Pro His Glu Thr Gly 65

Gly Tyr Met Leu Glu Cys Val Cys Leu Gly Asn Gly Lys Gly Glu Trp 95

Thr Cys Lys Pro Ile Ala Glu Lys Cys Phe Asp His Ala Ala Gly Thr 100 105 110

Ser Tyr Val Val Gly Glu Thr Trp Glu Lys Pro Tyr Gln Gly Trp Met 115 120 125

Met Val Asp Cys Thr Cys Leu Gly Glu Xaa Ser Gly Arg Ile Thr Cys 130 135 140

Thr Ser Arg Asn Arg Cys Asn Xaa Gln Asp Thr Arg Thr Ser Ile Glu 145 150 155 160

Xaa Glu Thr Xaa

<210> 1271

<211> 363

<212> PRT

<213> Homo sapiens

<400> 1271

Ala Arg Gly Ser Glu Cys Gly Gln Arg Ala Glu Ala Val Ser His Arg 1 5 10 15

Arg Arg Arg Ala Gln Ala Ser Ser Phe Gly Trp Gly Ala Ala Glu 20 25 30

Leu Thr Ser Asp Ile Ser Ala Pro Phe Thr Arg Arg Asn Pro Gly Ala
35 40 45

Gly Ala Arg Ser Ala Gly Val Thr Met Thr Lys Ala Gly Ser Lys Gly

	50)				55	•				60)			
Gly 65		Lev	ı Arg	, Asp	70		ı Asp	Gly	Asn	Glu 75		Asp	Leu	Ser	Leu 80
Ser	Asp	Leu	Asn	Glu 85		. Pro	Val	Lys	90		Ala	Ala	Leu	Pro 95	_
Ala	Thr	Ile	Leu 100	_	Leu	Ser	Cys	Asn 105	-	Leu	Thr	Thr	Leu 110		Ser
Asp	Phe	Cys 115	-	Leu	Thr	His	Leu 120		Lys	Leu	Asp	Leu 125		Lys	Asn
Lys	Leu 130		Gln	Leu	Pro	Ala 135	Asp	Phe	Gly	Arg	Leu 140		Asn	Leu	Gln
His 145	Leu	Asp	Leu	Leu	Asn 150		Lys	Leu	Val	Thr 155		Pro	Val	Ser	Phe
Ala	Gln	Leu	Lys	Asn 165	Leu	Lys	Trp	Leu	Asp 170		Lys	Asp	Asn	Pro 175	Leu
Asp	Pro	Val	Leu 180		Lys	Val	Ala	Gly 185	Asp	Cys	Leu	Asp	Glu 190	Lys	Gln
Cys	Lys	Gln 195	Cys	Ala	Asn	Lys	Val 200	Leu	Gln	His	Met	Lys 205	Ala	Val	Gln
Ala	Asp 210	Gln	Glu	Arg	Glu	Arg 215	Gln	Arg	Arg	Leu	Glu 220	Val	Glu	Arg	Glu
Ala 225	Glu	Lys	Lys	Arg	Glu 230	Ala	Lys	Gln	Arg	Ala 235	Lys	Glu	Ala	Gln	Glu 240
Arg	Glu	Leu	Arg	Lys 245	Arg	Glu	Lys	Ala	Glu 250	Glu	Lys	Glu	Arg	Arg 255	Arg
Lys	Glu	Tyr	Asp 260	Ala	Leu	Lys	Ala	Ala 265	Lys	Arg	Glu	Gln	Glu 270	Lys	Lys
Pro	Lys	Lys 275	Glu	Ala	Asn	Gln	Ala 280	Pro	Lys	Ser	Lys	Ser 285	Gly	Ser	Arg
Pro	Arg 290	Lys	Pro	Pro	Pro	Arg 295	Lys	His	Thr	Arg	Ser 300	Trp	Ala	Val	Leu
Lys 305	Leu	Leu	Leu	Leu	Leu 310	Leu	Leu	Phe	Gly	Val 315	Ala	Gly	Gly	Leu	Val 320
Ala	Cys	Arg	Val	Thr	Glu	Leu	Gln	Gln	Gln	Pro	Leu	Cys	Thr	Ser	Val

335

1298

330

325

Asn Thr Ile Tyr Asp Asn Ala Val Gln Gly Leu Arg Arg His Glu Ile 340 345 Leu Gln Trp Val Leu Gln Thr Asp Ser Gln Gln 360 355 <210> 1272 <211> 144 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (112) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (116) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (124) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1272 Gly Leu Val Met Ala Pro Ile Ala Cys Leu Leu Pro Ala Phe Ser Ser Ala Pro Glu Ala Met His Pro Trp Glu Leu Phe Val Lys Tyr Tyr His 20 25 Ala Lys Asn Gly Arg Ala Tyr Val Glu Ser Pro Ala Arg Lys Leu Ser 40 Gln Ser Phe Ala Leu Pro Val Thr Gly Gly Thr Val Val Thr Pro Lys

55

70

Gln Ser Leu Leu Thr Ala Ile His Met Val Leu Thr Glu His Asp Pro

Phe Lys Arg Ser Ala Asp Ser Glu Leu Lys Ala Leu Val Cys Met Ala

Leu Asn Glu Pro Ala Ser Gly Val Leu Gly Glu Pro His Leu Gln Xaa

Arg Val Thr Xaa Arg Ala Ser Leu Pro Ala Leu Xaa Leu His Gly Thr

His Arg Leu Leu Lys Ile Ala Ser Thr Cys Ser Val Ala Ser Thr Thr 130 135 140

<210> 1273

WO 00/55350

<211> 252

<212> PRT

<213> Homo sapiens

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<400> 1273

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Gln Arg Pro Ala Glu Ala Arg Cys Met Leu Ser Arg Cys Arg Ser Xaa 20 25 30

Leu Leu His Val Leu Gly Leu Ser Phe Leu Leu Gln Thr Arg Arg Pro 35 40 45

Ile Leu Leu Cys Ser Pro Arg Leu Met Lys Pro Leu Val Val Phe Val 50 55 60

Leu Gly Gly Pro Gly Ala Gly Lys Gly Thr Gln Cys Ala Arg Ile Val 65 70 75 80

Glu Lys Tyr Gly Tyr Thr His Leu Ser Ala Gly Glu Leu Leu Arg Asp 85 90 95

Glu Arg Lys Asn Pro Asp Ser Gln Tyr Gly Glu Leu Ile Glu Lys Tyr
100 105 110

Ile Lys Glu Gly Lys Ile Val Pro Val Glu Ile Thr Ile Ser Leu Leu 115 120 125

Lys Arg Glu Met Asp Gln Thr Met Ala Ala Asn Ala Gln Lys Asn Lys 130 135 140

Phe Leu Ile Asp Gly Phe Pro Arg Asn Gln Asp Asn Leu Gln Gly Trp

1300

145 150 155 160 Asn Lys Thr Met Asp Gly Lys Ala Asp Val Ser Phe Val Leu Phe Phe 170 165 Asp Cys Asn Asn Glu Ile Cys Ile Glu Arg Cys Leu Glu Arg Gly Lys Ser Ser Gly Arg Ser Asp Asp Asn Arg Glu Ser Leu Glu Lys Arg Ile 200 Gln Thr Tyr Leu Gln Ser Thr Lys Pro Ile Ile Asp Leu Tyr Glu Glu 215 Met Gly Lys Val Lys Lys Ile Asp Ala Ser Lys Ser Val Asp Glu Val 230 Phe Asp Glu Val Val Gln Ile Phe Asp Lys Glu Gly 245 <210> 1274 <211> 425 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (35) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1274 Ala Ser Glu Arg Ser Glu Ala Arg Arg Lys Leu Arg Glu Cys Asp Gly 10 Leu Val Asp Ala Leu Ile Phe Ile Val Gln Ala Glu Ile Gly Gln Lys Asp Ser Xaa Ser Lys Leu Val Glu Asn Cys Val Cys Leu Leu Arg Asn Leu Ser Tyr Gln Val His Arg Glu Ile Pro Gln Ala Glu Arg Tyr Gln Glu Ala Ala Pro Asn Val Ala Asn Asn Thr Gly Pro His Ala Ala Ser Cys Phe Gly Ala Lys Lys Gly Lys Gly Lys Pro Ile Glu Asp Pro

•••	non	nsp	100	var	vaħ	1110	110	105	-	1111	501		110		011
Tyr	Glu	Leu 115	Leu	Phe	Gln	Pro	Glu 120		Val	Arg	Ile	туг 125		Ser	Leu
Leu	Lys 130		Ser	Lys	Thr	Pro 135	Ala	Ile	Leu	Glu	Ala 140		Ala	Gly	Ala
Ile 145	Gln	Asn	Leu	Cys	Ala 150	Gly	Arg	Trp	Thr	Туг 155		Arg	Tyr	Ile	Arg 160
Ser	Ala	Leu	Arg	Gln 165		Lys	Ala	Leu	Ser 170		Ile	Ala	Asp	Leu 175	
Thr	Asn	Glu	His 180	Glu	Arg	Val	Val	Lys 185	Ala	Ala	Ser	Gly	Ala 190	Leu	Arg
Asn	Leu	Ala 195	Val	Asp	Ala	Arg	Asn 200	Lys	Glu	Leu	Ile	Gly 205		His	Ala
Ile	Pro 210	Asn	Leu	Val	Lys	Asn 215	Leu	Pro	Gly	Gly	Gln 220	Gln	Asn	Ser	Ser
Trp 225	Asn	Phe	Ser	Glu	Asp 230	Thr	Val	Ile	Ser	Ile 235	Leu	Asn	Thr	Ile	Asn 240
31u	Val	Ile	Ala	Glu 245	Asn	Leu	Glu	Ala	Ala 250	Lys	Lys	Leu	Arg	Glu 255	Thr
31n	Gly	Ile	Glu 260	Lys	Leu	Val	Leu	11e 265	Asn	Lys	Ser	Gly	Asn 270	Arg	Ser
3lu	Lys	G1u 275	Val	Arg	Ala	Ala	Ala 280	Leu	Val	Leu	Gln	Thr 285	Ile	Trp	Gly
Tyr	Lys 290	Glu	Leu	Arg	Lys	Pro 295	Leu	Gl u	Lys	Glu	Gly 300	Trp	Lys	Lys	Ser
Asp 305	Phe	Gln	Val	Asn	Leu 310	Asn	Asn	Ala	Ser	Arg 315	Ser	Gln	Ser	Ser	His 320
Ser	Tyr	Asp	Asp	Ser 325	Thr	Leu	Pro	Leu	11e 330	Asp	Arg	Asn	Gln	Lys 335	Ser
sp	Lys	Lys	Pro 340	Asp	Arg	Glu	Glu	Ile 345	Gln	Met	Ser	Asn	Met 350	Gly	Ser
sn		Lys 355		Leu			Asn 360		Ser	Thr		Asn 365		Arg	Gly

Asp His Asn Arg Thr Leu Asp Arg Ser Gly Asp Leu Gly Asp Met Glu 370 375 380

Pro Leu Lys Gly Thr Thr Pro Leu Met Gln Asp Glu Gly Gln Glu Ser 385 390 395 400

Leu Glu Glu Glu Leu Asp Val Leu Val Leu Asp Asp Glu Gly Gln 405 410 415

Val Ser Tyr Pro Ser Met Gln Lys Ile 420 425

<210> 1275

<211> 111

<212> PRT

<213> Homo sapiens

<220>

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<222> (10)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1275

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Lys Cys Ile Arg Thr Pro Lys Ile Ser Lys Pro Ile Lys Phe Glu Leu 20 25 30

Ser Gly Cys Thr Ser Met Lys Thr Tyr Arg Ala Lys Phe Cys Gly Val

Cys Thr Asp Gly Arg Cys Cys Thr Pro His Arg Thr Thr Leu Pro

Val Glu Phe Lys Cys Pro Asp Gly Glu Val Met Lys Lys Asn Met Met 65 70 75 80

Phe Ile Lys Thr Cys Ala Cys His Tyr Asn Cys Pro Gly Asp Asn Asp 85 90 95

Ile Phe Glu Ser Leu Tyr Tyr Arg Lys Met Tyr Gly Asp Met Ala

<210> 1276

<211> 766

<212> PRT

PCT/US00/05882

<213> Homo sapien	<213>	Homo	sabiens
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	Pro	Pro	Ser	Leu 20	Asp	ser	Pro	Gly	Pro 25	Gln	Leu	Met	Pro	Ser 30	Pro	Arg
	Pro	Val	Leu 35	Leu	Arg	Gly	Ala	Arg 40	Ala	Ala	Leu	Leu	Leu 45	Leu	Leu	Pro
	Pro	Arg 50	Leu	Leu	Ala	Arg	Pro 55	Ser	Leu	Leu	Leu	Arg 60	Arg	Ser	Leu	Ser
	Ala 65	Ala	Ser	Cys	Ala	Pro 70	Ile	Ser	Leu	Pro	Ala 75	Ala	Ala	Ser	Arg	Ser 80
	Ser	Met	Asp	Gly	Ala 85	Gly	Ala	Glu	Glu	Val 90	Leu	Ala	Pro	Leu	Arg 95	Leu
	Ala	Val	Arg	Gln 100	Gln	Gly	Asp	Leu	Val 105	Arg	Lys	Leu	Lys	Glu 110	Asp	Lys
	Ala	Pro	Gln 115	Val	Asp	Val	Asp	Lys 120	Ala	Val	Ala	Glu	Leu 125	Lys	Ala	Arg
	Lys	Arg 130	Val	Leu	Glu	Ala	Lys 135	Glu	Leu	Ala	Leu	Gln 140	Pro	Lys	Asp	Asp
	Ile 145	Val	Asp	Arg	Ala	Lys 150	Met	Glu	Asp	Thr	Leu 155	Lys	Arg	Arg	Phe	Phe 160
•	Tyr	Asp	Gln	Ala	Phe 165	Ala	Ile	Tyr	Gly	Gly 170	Val	Ser	Gly	Leu	туr 175	Asp
1	Phe	Gly	Pro	Val 180	Gly	Cys	Ala	Leu	Lys 185	Asn	Asn	Ile	Ile	Gln 190	Thr	Trp
i	Arg	Gln	His 195	Phe	Ile	Gln	Glu	Glu 200	Gln	Ile	Leu	Glu	Ile 205	Asp	Cys	Thr
1	Met	Leu 210	Thr	Pro	Glu	Pro	Val 215	Leu	Lys	Thr	Ser	Gly 220	His	Val	Asp	Lys
	Phe 225	Ala	Asp	Phe	Met	Val 230	Lys	Asp	Val	Lys	Asn 235	Gly	Glu	Cys	Phe	Arg 240
1	Ala	Asp	His	Leu	Leu 245	Lys	Ala	His	Leu	Gln 250	Lys	Leu	Met	Ser	Asp 255	Lys

Lys	: Суя	s Ser	260		ı Lys	Lys	s Ser	265		: Glu	ı Ser	. Val	. Leu 270		Glr
Leu	Asp	275		Gly	Gln	Gln	Glu 280		Alæ	a Asp	Leu	285		. Asn	туг
Asn	Val 290	-	Ser	Pro	Ile	Thr 295	_	Asn	Asp	Leu	300		Pro	Val	. Ser
Phe 305		Leu	Met	Phe	Lys 310		Phe	Ile	Gly	7 Pro 315	_	Gly	Asn	Met	320
Gly	Tyr	Leu	Arg	9ro 325	Glu	Thr	Ala	Gln	Gly 330		Phe	e Leu	Asn	335	_
Arg	Leu	Leu	Glu 340		: Asn	Gln	Gly	Lys 345		Pro	Phe	: Ala	Ala 350		Gln
Ile	Gly	Asn 355		Phe	Arg	Asn	Glu 360		Ser	Pro	Arg	365	_	Leu	Ile
Arg	Val 370	-	Glu	Phe	Thr	Met 375		Glu	Ile	Glu	His 380		Val	Asp	Pro
Ser 385		ГÀа	Asp	His	Pro 390	Lys	Phe	Gln	Asn	Val 395		Asp	Leu	His	Leu 400
Tyr	Leu	Tyr	Ser	Ala 405	Lys	Ala	Gln	Val	Ser 410	_	Gln	Ser	Ala	Arg 415	-
Met	Arg	Leu	Gly 420	Asp	Ala	Val	Glu	Gln 425	Gly	Val	Ile	Asn	Asn 430	Thr	Val
Leu	Gly	туr 435	Phe	Ile	Gly	Arg	Ile 440	Tyr	Leu	Tyr	Leu	Thr 445	Lys	Val	Gly
Ile	Ser 450	Pro	Asp	Lys	Leu	Arg 455	Phe	Arg	Gln	His	Met 460	Glu	Asn	Glu	Met
Ala 465	His	Tyr	Ala	Cys	Asp 470	Cys	Trp	Asp	Ala	Glu 475	Ser	Lys	Thr	Ser	Tyr 480
Gly	Trp	Ile	Glu	Ile 485	Val	Gly	Cys	Ala	Asp 490	Arg	Ser	Сув	Tyr	Asp 495	Leu
Ser	Суз	His	Ala 500	Arg	Ala	Thr	Lys	Val 505	Pro	Leu	Val	Ala	Glu 510	Lys	Pro
Leu	Lys	Glu 515	Pro	Lys	Thr	Val	Asn 520	Val	Val	Gln	Phe	Glu 525	Pro	Ser	Lys

Gly	Ala 530		Gly	Lys	Ala	Туг 535	Lys	Lys	Asp	Ala	Lys 540	Leu	Val	Met	Glu
Туг 545	Leu	Ala	Ile	Cys	Asp 550	Glu	Cys	Tyr	Ile	Thr 555	Glu	Met	Glu	Met	Leu 560
Leu	Asn	Glu	Lys	Gly 565	Glu	Phe	Thr	Ile	Glu 570		Glu	Gly	Lys	Thr 575	Phe
Gln	Leu	Thr	Lys 580	Asp	Met	Ile	Asn	Val 585	Lys	Arg	Phe	Gln	Lys 590	Thr	Leu
Tyr	Val	Glu 595	Glu	Val	Val	Pro	Asn 600	Val	Ile	Glu	Pro	ser 605	Phe	Gly	Leu
Gly	Arg 610	Ile	Met	Tyr	Thr	Val 615	Phe	Glu	His	Thr	Phe 620	His	Val	Arg	Glu
Gly 625	Asp	Glu	Gln	Arg	Thr 630	Phe	Phe	Ser	Phe	Pro 635	Ala	Val	Val	Ala	Pro 640
Phe	Lys	Cys	Ser	Val 645	Leu	Pro	Leu	Ser	Gln 650	Asn	Gln	Glu	Phe	Met 655	Pro
Phe	Val	Lys	Glu 660	Leu	Ser	Glu	Ala	Leu 665	Thr	Arg	His	Gly	Val 670	Ser	His
Lys	Val	Asp 675	Asp	Ser	Ser	Gly	Ser 680	Ile	Gly	Arg	Arg	Tyr 685	Ala	Arg	Thr
Asp	Glu 690	Ile	Gly	Val	Ala	Phe 695	Gly	Val	Thr	Ile	Asp 700	Phe	Asp	Thr	Val
Asn 705	Lys	Thr	Pro	His	Thr 710	Ala	Thr	Leu	Arg	Asp 715	Arg	Asp	Ser	Met	Arg 720
Gln	Ile	Arg	Ala	Glu 725	Ile	Ser	Glu	Leu	Pro 730	Ser	Ile	Val	Gln	Asp 735	Leu
Ala	Asn	Gly	Asn 740	Ile	Thr	Trp	Ala	Asp 745	Val	Glu	Ala	Arg	Tyr 750	Pro	Leu

Phe Glu Gly Gln Glu Thr Gly Lys Lys Glu Thr Ile Glu Glu 755 760 760 765

<210> 1277

<211> 386

<212> PRT

<213> Homo sapiens

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<22	3> X	aa e	qual	s an	y of	the	nat	ural	ly o	ccur	ring	L-a	mino	aci	ds
<40	0> 1	277													
Leu	Gly	Ser	Arg	Gln	Ala	Ala	Gly	Thr	Met	Arg	Gly	Gln	Arg	ser	Leu
1				5					10					15	
Leu	Leu	Gly	Pro	Ala	Arg	Leu	Cys	Leu	Arg	Leu	Leu	Leu	Leu	Leu	Gly
			20					25					30		
Tvr	Arq	Ara	Arg	Cys	Pro	Pro	Leu	Leu	Arg	Gly	Leu	Val	Gln	Arg	Trp
-	-	35	_	-			40			-		45			-
3		01	•		~	•	3	a		T	Ma e sa	7	Co-	Dho	C1
Arg	Tyr 50	GIY	rys	Val	Cys	ьец 55	Arg	ser	Leu	ьeu	17r 60	Asn	ser	Pne	GIY
	50					55					00				
Gly	Ser	Asp	Thr	Ala	Val	Asp	Ala	Ala	Phe	Xaa	Pro	Val	Tyr	Trp	Leu
65					70					75					80
1757	7 an	700	77-3	T1.	7. ~~	men	Bho	C1	17-1	17-1	Dha	17-1	17 - 1	Tan	Wa 1
vai	Азр	ASII	vai	Ile 85	ALG	TIP	Pne	GIY	90	var	FIIC	VAI	Val	95	Val
Ile	Val	Leu	Thr	Gly	Ser	Ile	Val	Ala	Ile	Ala	Tyr	Leu	Cys	Val	Leu
			100					105					110		
Dwa	T 0	T1.0	7 011	7. ~~~	mh ~	m	C ~ ~	17.2.1	Dwo	7 ~~~	Tan	Cvc	mro.	wie	Dha
PIO	пец	115	Leu	Arg	THE	TÄT	120	Val	FIO	ALG	neu	125	TTP	นรอ	FIIC
Phe	Tyr	Ser	His	Trp	Asn	Leu	Ile	Leu	Ile	Val	Phe	His	Tyr	Tyr	Gln
	130					135					140				
Ala	Tle	Thr	Thr	Pro	Pro	Glv	Tur	Pro	Pro	Gln	Glv	Ara	Asn	Asp	Tle
145	***	1111	1111	110	150	GLy	± y *-	110		155	911	**** 9	11011	шр	160
Ala	Thr	Val	Ser	Ile	Cys	Lys	Lys	Cys		Tyr	Pro	Lys	Pro		Arg
				165					170					175	
Thr	His	His	Cvs	Ser	Ile	Cvs	Asn	Ara	Cvs	Val	Leu	Lvs	Met	Asp	His
			180			-1-		185	-1-			-1-	190		
His	Cys		Trp	Leu	Asn	Asn	-	Val	Gly	His	Tyr		His	Arg	Tyr
		195					200					205			
Phe	Phe	Ser	Phe	Cys	Phe	Phe	Met	Thr	Leu	Glv	Cys	Val	Tyr	Cys	Ser
	210			<i>1</i> =		215				-4	220			4-	
	Gly	Ser	Trp	Asp		Phe	Arg	Glu	Ala		Ala	Ala	Ile	Glu	_
225					230					235					240

Met Lys Gln Leu Asp Lys Asn Lys Leu Gln Ala Val Ala Asn Gln Thr 245 250 250

Tyr His Gln Thr Pro Pro Pro Thr Phe Ser Phe Arg Glu Arg Met Thr 260 265 270

His Lys Ser Leu Val Tyr Leu Trp Phe Leu Cys Ser Ser Val Ala Leu 275 280 285

Ala Leu Gly Ala Leu Thr Val Trp His Ala Val Leu Ile Ser Arg Gly 290 295 300

Glu Thr Ser Ile Glu Arg His Ile Asn Lys Lys Glu Arg Arg Arg Leu 305 310 315 320

Gln Ala Lys Gly Arg Val Phe Arg Asn Pro Tyr Asn Tyr Gly Cys Leu 325 330 335

Asp Asn Trp Lys Val Phe Leu Gly Val Asp Thr Gly Arg His Trp Leu 340 345 350

Thr Arg Val Leu Leu Pro Ser Ser His Leu Pro His Gly Asn Gly Met 355 360 365

Ser Trp Glu Pro Pro Pro Trp Val Thr Ala His Ser Ala Ser Val Met 370 375 380

Ala Val 385

<210> 1278

<211> 164

<212> PRT

<213> Homo sapiens

<400> 1278

Val Lys Ala Ser Ala Glu Thr Pro Arg Pro Gln Pro Val Asp Lys Leu

1 5 10 15

Glu Lys Ile Leu Glu Lys Leu Leu Thr Arg Phe Pro Gln Cys Asn Lys 20 25 30

Ala Gln Met Thr Asn Ile Leu Gln Gln Ile Lys Thr Ala Arg Thr Thr 35 40 45

Met Ala Gly Leu Thr Met Glu Glu Leu Ile Gln Leu Val Ala Ala Arg 50 55 60

1308

Leu Ala Glu His Glu Arg Val Ala Ala Ser Thr Gln Pro Leu Gly Arg 65 75 70 Ile Arg Ala Leu Phe Pro Ala Pro Leu Ala Gln Ile Ser Thr Pro Met 90 Phe Leu Pro Ser Ala Gln Val Ser Tyr Pro Gly Arg Ser Ser His Ala 105 Pro Ala Thr Cys Lys Leu Cys Leu Met Cys Gln Lys Leu Val Gln Pro Ser Glu Leu His Pro Met Ala Cys Thr His Val Leu His Lys Glu Cys 135 Ile Lys Phe Trp Ala Gln Thr Asn Thr Asn Asp Thr Cys Pro Phe Cys 150 155 Pro Thr Leu Lys <210> 1279 <211> 469 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (15) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (81) <223> Xaa equals any of the naturally occurring L-amino acids

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 5
 10
 15

 Val Leu Gln Thr Thr Lys Gly Leu Arg Leu Leu Phe Asp Gly Asp Ala 20
 25
 30

 His Leu Leu Met Ser Ile Pro Ser Pro Phe Arg Gly Arg Leu Cys Gly 35
 40
 45

<400> 1279

Leu Cys Gly Asn Phe Asn Gly Asn Trp Ser Asp Asp Phe Val Leu Pro 50 55 60

PCT/US00/05882

1309

WO 00/55350

Asn 65		Ser	Ala	a Ala	Ser 70		Val	. Glu	Thi	75		Ala	a Ala	Trp	Arg 80
Xaa	Pro	Gly	sei	ser 85	-	Gly	Cys	Gly	90	-	Cys	Gly	Pro	95	-
Cys	Pro	Val	. Cys		ı Ala	Glu	Glu	Thr 105		Pro	туг	Glu	Ser 110		Glu
Ala	Cys	Gly 115		l Leu	Arg	Asn	Pro 120		Gly	Pro	Phe	125		Cys	Gln
Ala	Val 130		Ser	Pro	Ser	Glu 135	Tyr	Phe	Arg	, Gln	Cys 140		Tyr	Asp	Leu
Cys 145	Ala	Gln	Lys	Gly	Asp 150		Ala	Phe	Leu	Cys 155		Ser	Leu	Ala	Ala 160
Tyr	Thr	Ala	Ala	Cys 165		Ala	Ala	Gly	Val 170		Val	Lys	Pro	Trp 175	
Thr	Asp	Ser	Phe 180	_	Pro	Leu	His	Cys 185	Pro	Ala	His	Ser	His 190	Tyr	Ser
Ile	Cys	Thr 195		Thr	Cys	Gln	Gly 200	Ser	Cys	Ala	Ala	Leu 205		Gly	Leu
Thr	Gly 210	Суз	Thr	Thr	Arg	Cys 215	Phe	Glu	Gly	Cys	Glu 220	Cys	Asp	Asp	Arg
Phe 225	Leu	Leu	Ser	Gln	Gly 230	Val	Cys	Ile	Pro	Val 235	Gln	Asp	Cys	Gly	Cys 240
Phr	His	Asn	Gly	Arg 245	Tyr	Leu	Pro	Val	Asn 250	Ser	Ser	Leu	Leu	Thr 255	Ser
Asp	Суз	Ser	Glu 260	Arg	Cys	Ser	Суз	Ser 265	Ser	Ser	Ser	Gly	Leu 270	Thr	Cys
Sln	Ala	Ala 275	Gly	Суз	Pro	Pro	Gly 280	Arg	Val	Суз	Glu	Val 285	Lys	Ala	Glu
la	Arg 290	Asn	Суз	Trp	Ala	Thr 295	Arg	Gly	Leu	Cys	Val 300	Leu	Ser	Val	Gly
1a 05	Asn	Leu	Thr	Thr	Phe 310	Asp	Gly	Ala	Arg	Gly 315	Ala	Thr	Thr	Ser	Pro 320
ly	Val	Tyr		Leu 325		Ser	Arg	Cys			Leu	Gln		Thr	

1310

Pro Trp Tyr Arg Val Val Ala Glu Val Gln Ile Cys His Gly Lys Thr 340 345 Glu Ala Val Gly Gln Val His Ile Phe Phe Gln Asp Gly Met Val Thr 360 Leu Thr Pro Asn Lys Gly Val Trp Val Asn Gly Leu Arg Val Asp Leu 375 380 Pro Ala Glu Lys Leu Ala Ser Val Ser Val Ser Arg Thr Pro Asp Gly 395 Ser Leu Leu Val Arg Gln Lys Ala Gly Val Gln Val Trp Leu Gly Ala Asn Gly Lys Val Ala Val Ile Val Ser Asn Asp His Ala Gly Lys Leu 425 Cys Gly Ala Cys Gly Asn Phe Asp Gly Asp Gln Thr Asn Asp Trp His 440 Asp Ser Gln Glu Lys Pro Ala Met Glu Lys Trp Arg Ala Gln Asp Phe 455 460 Ser Pro Cys Tyr Gly 465 <210> 1280 <211> 223 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (216) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (217) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1280 Gly Pro Arg Ala Leu Trp Pro Pro Pro Glu Val Gly Trp Gly Cys Ser 10

Pro Asn Pro Thr Leu Leu Pro Pro Leu Ser His Phe Pro Leu Leu Arg

<400> 1281

Trp Gly Thr Asn Asn Lys Glu Leu Thr Leu Pro Ala Pro Asn Pro Pro 35 40 Pro Ala Pro Pro Cys Pro Pro Arg Phe Trp Phe His Phe Ser Ser Val His Lys Leu Pro Leu Asp Ser Cys Val Val Phe Cys Ser Met Phe His 70 75 Ser Ser Thr Ser Val Ile Ala Ala Ala Thr Ser Ala Lys Cys Ser Ser Ser Leu Pro Pro Val Leu Pro Thr Ile Pro Ser Pro Lys Ile Leu Phe Val Gly Lys Arg Gly Trp Gly Met Ala Gly Trp Val Thr Asp Tyr Pro 120 Ser Pro Arg Glu Gly Gly Ala Leu Pro Leu Gly Cys Cys Ser Arg Val 135 Ser Lys Gly Ala Arg Ile Asp His Lys Gly Cys Arg Gly His Leu Leu 155 Pro Leu Phe Cys Trp Gly Gly Val Ala Met Ile Cys Pro Ser Leu Gly Leu Pro Leu Trp Phe Pro Ile Cys Ser Tyr Leu Asn Lys Lys Asn Ile 185 200 Lys Lys Lys Lys Lys Lys Xaa Xaa Gly Gly Ala Pro Pro Pro 210 215 <210> 1281 <211> 37 <212> PRT <213> Homo sapiens <220> <221> SITE <223> Xaa equals any of the naturally occurring L-amino acids

Thr Gln Ser Lys Trp Arg Leu Glu Val Gln Cys Gly Lys Glu Lys Gln

Val Phe Ile Glu Ser Thr Asn Ser Thr Pro Phe Lys Asn Phe Xaa Gly 20 25 30

Thr Gln Pro Lys Gly 35

<210> 1282

<211> 458

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (249)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1282

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Ser Leu Leu Gly Pro Leu Leu Thr Ala Cys Ala Leu Leu Pro Phe Ala 20 25 30

Gln Gly Gln Thr Pro Asn Tyr Thr Arg Pro Val Phe Leu Cys Gly Gly 35 40 45

Asp Val Lys Gly Glu Ser Gly Tyr Val Ala Ser Glu Gly Phe Pro Asn 50

Leu Tyr Pro Pro Asn Lys Glu Cys Ile Trp Thr Ile Thr Val Pro Glu 65 70 75 80

Gly Gln Thr Val Ser Leu Ser Phe Arg Val Phe Asp Leu Glu Leu His $85 \hspace{1cm} 90 \hspace{1cm} 95$

Pro Ala Cys Arg Tyr Asp Ala Leu Glu Val Phe Ala Gly Ser Gly Thr

Ser Gly Gln Arg Leu Gly Arg Phe Cys Gly Thr Phe Arg Pro Ala Pro 115 120 125

Leu Val Ala Pro Gly Asn Gln Val Thr Leu Arg Met Thr Thr Asp Glu 130 135 140

Gly Thr Gly Gly Arg Gly Phe Leu Leu Trp Tyr Ser Gly Arg Ala Thr 145 150 155 160

Ser Gly Thr Glu His Gln Phe Cys Gly Gly Arg Leu Glu Lys Ala Gln

				165	5				170)				175	5
Gl	Th:	Lei	1 Thr		Pro	Ası	ı Trp	Pro 185		ı Ser	Asp	туг	190		Gly
Ile	e Sei	Cys 195		Trp	His	; Ile	≥ Ile 200		Pro	Pro	Asp	Glr 205		. Ile	e Ala
Leu	210		e Glu	Lys	Phe	Asp 215	Leu ,	Glu	Pro	Asp	220		Cys	Arg	Tyr
Asp 225		Val	. Ser	Val	. Phe 230		ı Gly	Ala	Val	. Ser 235	_	Asp	Ser	Arg	Arg 240
Leu	Gly	' Lys	: Phe	Cys 245	_	Asp) Ala	Xaa	Pro 250	-	Ser	Ile	Ser	Ser 255	
Gly	Asn	Glu	260		Val	. Gln	Phe	Val 265		. Asb	Leu	Ser	Val 270		Ala
Asp	Gly	Phe 275		Ala	Ser	Tyr	Lys 280		Leu	Pro	Arg	Gly 285		Ala	Lys
Glu	Gly 290		Gly	Pro	Gly	Pro 295	Lys	Arg	Gly	Thr	G1u 300	Pro	Lys	Val	Lys
Leu 305		Pro	Lys	Ser	Gln 310		Pro	Glu	Lys	Thr 315		Glu	Ser	Pro	ser 320
Ala	Pro	Asp	Ala	Pro 325	Thr	Cys	Pro	Lys	Gln 330	_	Arg	Arg	Thr	Gly 335	Thr
Leu	Gln	Ser	Asn 340	Phe	Cys	Ala	Ser	Ser 345	Leu	Val	Val	Thr	Ala 350	Thr	Val
Lys	Ser	Met 355	Val	Arg	Glu	Pro	Gly 360	Glu	Gly	Leu	Ala	Val 365	Thr	Val	Ser
Leu	Ile 370	Gly	Ala	Tyr	Lys	Thr 375	Gly	Gly	Leu	Asp	Leu 380	Pro	Ser	Pro	Pro
Thr 385	Gly	Ala	Ser	Leu	Lys 390	Phe	Tyr	Val	Pro	Cys 395	Lys	Gln	Cys	Pro	Pro 400
Met	Lys	Lys	Gly	Val 405	Ser	Tyr	Leu	Leu	Met 410	Gly	Gln	Val	Glu	Glu 415	Asn
Arg	Gly	Pro	Val 420	Leu	Pro	Pro	Glu	ser 425	Phe	Val	Val	Leu	His 430	Arg	Pro
Asn	Gln	Asp	Gln	Ile	Leu	Thr	Asn	Leu	Ser	Lys	Arg	Lys	Cys	Pro	Ser

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1314

440 445 435 Gln Pro Val Arg Ala Ala Ser Gln Asp 450 455 <210> 1283 <211> 229 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (45) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (154) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (155) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1283 Cys Arg Ala Pro Leu Gly Ala Gly Leu Ser Pro Ala Val Arg Arg Gln 5 Glu Pro Pro Phe Pro Leu Gly Val Thr Arg Gly Trp Gly Arg Trp Pro 25 Ile Gln Lys Arg Arg Glu Gly Ala Arg Pro Val Pro Xaa Ser Glu Arg 35 40 Ser Gln Glu Asp Gly Arg Gly Pro Ala Ala Arg Ser Ser Gly Thr Leu 55 Trp Arg Ile Arg Thr Arg Leu Ser Leu Cys Arg Asp Pro Glu Pro Pro 65 70 Pro Pro Leu Cys Leu Leu Arg Val Ser Leu Leu Cys Ala Leu Arg Ala Gly Gly Arg Gly Ser Arg Trp Gly Glu Asp Gly Ala Arg Leu Leu 105

Leu Pro Pro Ala Arg Ala Ala Gly Asn Gly Glu Ala Glu Pro Ser Gly
115 120 125

1315

Gly Pro Ser Tyr Ala Gly Arg Met Leu Glu Ser Ser Gly Cys Lys Ala Leu Lys Glu Gly Val Leu Glu Lys Arg Xaa Xaa Gly Cys Cys Ser Ser 155 Gly Arg Lys Ser Val Ala Ser Ser Pro Arg Lys Gly Cys Cys Leu Ser Arg Pro Ser Ser Cys Asn Thr Ser Ser Ser Ser Asn Ser Ser Ser Ser 180 185 Ser Ser Asn Asn Ser Pro Gly Arg Gly Arg Pro Ser Arg Pro Asn Pro 200 Val Ala Pro Leu Ser Pro Ala Ser Ser Arg Arg Ser Ser Ser Arg Asn 215 Cys Thr Ser Pro Thr <210> 1284 <211> 390 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (52) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1284 Thr Ser Val Ala Ala Ala Ala Ala arg Gly Arg Ala Gly Cys Pro Leu Thr Ala Ala Ser Ala Ala Arg Phe Lys Met Ala Ala Cys Ser His Ser '20 25 Phe Ser Ala Glu Arg Leu Leu Thr Phe Ile Val Phe Ser Ala Arg Phe 40 Asp Arg Leu Xaa Pro Ala Ala Leu Ser Gly Ile Phe Tyr Gln Ala Glu 50 55 Met His Arg Thr Thr Arg Ile Lys Ile Thr Glu Leu Asn Pro His Leu Met Cys Val Leu Cys Gly Gly Tyr Phe Ile Asp Ala Thr Thr Ile Ile

				8	5				90)				95	5
Gli	1 Су:	s Lei	1 Hi:		r Phe	е Суя	s Lys	Thr 105		; Ile	. Val	. Arg	ту: 110		Glu
Thi	: Se	Lys 115	_	с Су	s Pro	rle	2 Cys	-	Va]	l Gln	val	. His	_	Thr	Arg
Pro	Let 130		ı Ası	ıle	e Arç	Ser 135	_	Lys	Thr	Leu	Gln 140	_) Ile	· Val	. Tyr
Lys 145		ı Val	l Pro	Gly	/ Leu 150		. Lys	Asn	Glu	Met 155		Arg	Arg	Arg	Asp 160
Phe	туг	: Ala	a Ala	His 165		Ser	Ala	Asp	Ala 170		Asn	Gly	Ser	Asn 175	Glu
Asp	Arg	, Gly	180		. Ala	Asp	Glu	Asp 185	-	Arg	Ile	Ile	Thr 190	Asp	Asp
Glu	Ile	195		Leu	. Ser	Ile	Glu 200	Phe	Phe	Asp	Gln	Asn 205	Arg	Leu	Asp
Arg	Lys 210		. Asn	Lys	Asp	Lys 215		Lys	Ser	Lys	Glu 220	Glu	Val	Asn	Asp
Lys 225	Arg	Tyr	Leu	Arg	Cys 230	Pro	Ala	Ala	Met	Thr 235	Val	Met	His	Leu	Arg 240
Lys	Phe	Leu	Arg	Ser 245	Lys	Met	Asp	Ile	Pro 250	Asn	Thr	Phe	Gln	Ile 255	Asp
Val	Met	Tyr	Glu 260	Glu	Glu	Pro	Leu	Lys 265	Asp	Tyr	Tyr	Thr	Leu 270	Met	Asp
Ile	Ala	Туг 275	Ile	Tyr	Thr	Trp	Arg 280	Arg	Asn	Gly	Pro	Leu 285	Pro	Leu	Lys
Tyr	Arg 290	Val	Arg	Pro	Thr	Cys 295	Lys	Arg	Met	Lys	Ile 300	Ser	His	Gln	Arg
Asp 305	Gly	Leu	Thr	Asn	Ala 310	Gly	Glu	Leu	Glu	Ser 315	Asp	Ser	Gly	Ser	Asp 320
Lys	Ala	Asn	Ser	Pro 325	Ala	Gly	Gly	Ile	Pro 330	Ser	Thr	Ser	Ser	Cys 335	Leu
Pro	Ser	Pro	Ser 340	Thr	Pro	Val	Gln	ser 345	Pro	His	Pro	Gln	Phe 350	Pro	His
Ile	Ser	Ser	Thr	Met	Asn	Gly	Thr	Ser	Asn	Ser	Pro	Ser	Gly	Asn	His

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360
         355
                                                 365
 Gln Ser Ser Phe Ala Asn Arg Pro Arg Lys Ser Ser Val Asn Gly Ser
                        375
 Ser Ala Thr Ser Ser Gly
 385
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His Ala Ser Ala Gly Ser Gln Leu Phe Glu Met His Glu Lys Leu Ser
                  5
Cys Met Ala Asn Ser Val Ile Lys Asn Leu Gln Ser Arg Trp Arg Ser
                                 25
Pro Ser His Glu Asn Ser Ile
         35
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Gly	' Leu	Pro	Leu 20		Leu	Pro	Gln	Pro 25		Ile	Pro	Ala	Ala 30		Pro
Gln	Ser	Ala 35		Pro	Xaa	. Pro	His 40	-	Glu	Glu	Thr	Val 45		Ala	Thi
Ala	Thr 50		Gln	Val	Ala	Gln 55	Gln	Pro	Pro	Ala	Ala 60		Ala	Pro	Gly
Glu 65		Ala	. Val	Ala	Gly 70		Ala	Pro	Arg	Leu 75		Pro	Ala	Val	Pro 80
Ala	Lys	Thr	Ala	Gln 85	Cys	Pro	Ser	Leu	Ala 90		Trp	Gly	Ala	Lys 95	_
Ser	Arg	Arg	Arg 100		Lys	Val	Ala	Ala 105		Ala	Gln	Ala	Xaa 110	_	Glu
Pro	Gln	Glu 115		Arg	Ser	Gln	Gln 120	Gln	Asp	Asp	Ile	Glu 125	Glu	Leu	Glu
Thr	Lys 130		Val	Gly	Met	Ser 135	Asn	Asp	Gly	Arg	Phe 140	Leu	Lys	Phe	Asp
Ile 145	Glu	Ile	Gly	Arg	Gly 150	Ser	Phe	Lys	Thr	Val 155	Tyr	Lys	Gly	Leu	Asp 160
Thr	Glu	Thr	Thr	Val 165	Glu	Val	Ala	Trp	Cys 170	Glu	Leu	Gln	Asp	Arg 175	Lys
Leu	Thr	Lys	Ser 180	Glu	Arg	Gln	Arg	Phe 185	Lys	Glu	Glu	Ala	Glu 190	Met	Leu
Lys	Gly	Leu 195	Gln	His	Pro	Asn	Ile 200	Val	Arg	Phe	Tyr	Asp 205	Ser	Trp	Glu
Ser	Thr 210	Val	Lys	Gly	Lys	Lys 215	Cys	Ile	Val	Leu	Val 220	Thr	Glu	Leu	Met
Thr 225	Ser	Gly	Thr	Leu	Lys 230	Thr	Tyr	Leu	Lys	Arg 235	Phe	Lys	Val	Met	Lys 240
Ile	Lys	Val	Leu	Arg 245	Ser	Trp	Cys	Arg	Gln 250	Ile	Leu	Lys	Gly	Leu 255	Gln
Phe	Leu	His	Thr	Arg	Thr	Pro	Pro	Ile	Ile	His	Arg	Asp	Leu	Lys	Cys

1319

260 265 270 Asp Asn Ile Phe Ile Thr Gly Pro Thr Gly Ser Val Lys Xaa Gly Asp 280 285 Leu Gly Leu Ala Thr Leu Lys Arg Ala Ser Phe Ala Lys Ser Val Ile 295 Gly Thr Pro Glu Phe Met Ala Pro Glu Met Tyr Glu Glu Lys Tyr Asp Glu Ser Val Asp Val Tyr Ala Phe Gly Met Cys Met Leu Glu Met Ala Thr Ser Glu Tyr Pro Tyr Ser Glu Cys Gln Asn Ala Ala Gln Ile Tyr 340 345 Arg Arg Val Thr Ser Gly Val Lys Pro Ala Ser Phe Asp Lys Val Ala 360 Ile Pro Glu Val Lys Glu Ile Ile Glu Gly Cys Ile Arg Gln Asn Lys 375 Asp Glu Arg Tyr Ser Ile Lys Asp Leu Leu Asn His Ala Phe Phe Gln Glu Glu Thr Gly Val Arg Val Glu Leu Ala Glu Glu Asp Asp Gly Glu Lys Ile Ala Ile Lys Leu Trp Leu Arg Ile Glu Asp Ile Lys Lys Leu 425 Lys Gly Lys Tyr Lys Asp Lys Lys Lys Lys Lys Lys Lys Lys Lys 435 440 Asn Thr His Arg Ala 450 <210> 1287 <211> 450 <212> PRT <213> Homo sapiens <220> <221> SITE

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<222> (33)

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Trp Met Thr Val Gly Pro Ala Ser Ala Leu Phe Pro Cys Gln Thr Pro
             20
Xaa Phe Pro Trp Thr Glu Trp Asn Xaa Trp Xaa Phe Thr Ala His Val
Leu Ser Gln Lys Phe Glu Lys Glu Leu Ser Lys Val Arg Glu Tyr Val
     50
                         55
Gln Leu Ile Ser Val Tyr Glu Lys Lys Leu Leu Asn Leu Thr Val Arg
                     70
                                         75
Ile Asp Ile Met Glu Lys Asp Thr Ile Ser Tyr Thr Glu Leu Asp Phe
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				85	5				9()				95	5
Glu	ı Leı	ı Ile	e Lys		l Gli	ı Vai	L Lys	105		: Glu	ı Lys	Lei	1 Val		e Glr
Leu	ı Lys	5 Glu 115		a Phe	e Gly	y Gly	7 Sei 120		Glu	ı Ile	e Val	125		ı Lei	ı Glu
Val	. Glu 130		e Arç) Asr	Met	135	Leu	ı Lev	ı Val	l Glu	140		ı Glu	Thr	Leu
Asp 145		. Asr	a Asn	val	. Leu 150		ı Ile	e Arg	, Arg	155		val	. Ala	. Lev	160
Thr	Lys	. Lev	. Lys	165		Glu	ı Ala	. Ser	170		Gln	Asn	Thr	175	
Val	. His	Pro	Pro 180		Thr	Pro	Gly	Ser 185		Gly	His	Gly	Gly 190		. Val
Xaa	Ile	Ser 195	_	Pro	Ser	· Val	. Val 200		Leu	Asn	Trp	Arg 205	_	Phe	Ser
Tyr	Leu 210	_	Gly	Ala	Trp	Gly 215	Arg	Asp	Tyr	Ser	220	Gln	His	Pro	Asn
Lys 225		Leu	Tyr	Trp	Val 230		Pro	Leu	Asn	Thr 235	Asp	Gly	Arg	Leu	Leu 240
Glu	Tyr	Туг	Arg	Leu 245	Tyr	Asn	Thr	Leu	Asp 250	_	Leu	Leu	Leu	Tyr 255	Ile
			260				Thr	265					270		
		275				-	Val 280					285			
	290					295	Asn				300				
9ro 305	Asn	Ala	Ala	Tyr	Asn 310	Asn	Arg	Phe	Xaa	Tyr 315	Ala	Asn	Val	Ala	Trp 320
	_		_	325			Asp		330	-		-		335	•
			340				Xaa	345					350		
Thr	Thr	Leu	Gln	Val	Leu	Asn	Thr	Trp	Tyr	Thr	Lys	Gln	Tyr	Lys	Pro

355 365 360 Ser Ala Ser Asn Ala Phe Met Val Cys Gly Val Leu Tyr Ala Thr Arg 375 Thr Met Asn Thr Arg Thr Glu Glu Ile Phe Tyr Tyr Tyr Asp Thr Asn Thr Gly Lys Glu Gly Lys Leu Asp Ile Val Met His Lys Met Gln Glu Lys Val Gln Ser Ile Asn Tyr Asn Pro Phe Asp Gln Lys Leu Tyr Val 425 Tyr Asn Asp Gly Tyr Leu Leu Asn Tyr Asp Leu Ser Val Leu Gln Lys 435 440 Pro Gln 450 <210> 1288 <211> 164 <212> PRT <213> Homo sapiens <400> 1288 Leu Gln Gln Ala Leu Pro Asn Asn Gly Leu Leu Phe Thr Trp Thr Leu Ser Lys Glu Gly Gly Arg Glu Gly Gln Ser Gly Val Ser Phe Gln His Ser Ser Gln Lys Gly Glu Arg Phe Ser Gly Trp Cys His Ala Ile Gly Ile Lys Gln Glu Ala His Gly Trp Leu Leu Asn Glu Glu Gln Asn Leu Gly Ala Leu Trp Leu Thr Thr Ala Ile Cys Gly Ala Gly Thr His Thr 70 Ser Arg Gln Leu Gln Phe Cys Thr Phe Ser Leu Leu Asp Ser Lys Ser 90 Arg Cys Cys Leu Ala Ala Leu Arg Gly His Ser Leu Leu Arg Arg Ala 100 105 Leu Gln Ser Pro Ala Pro Gly Leu Gly Glu Trp Met Arg Leu Leu Pro

120

1323

Tyr Asp Thr Cys Gln Asp Ala Leu Pro Pro Pro Leu Lys Val Gly Pro 135 Gly Gln His Cys Ser Leu Leu Ser Ala Phe Ser Gly Leu Arg Ser Gln 145 150 155 Tyr Glu Leu Pro <210> 1289 <211> 40 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (6) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (30) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1289 Trp Met Ser Glu Tyr Xaa Gln Trp Val Phe Leu Ile Ser Leu Arg Ile Cys Leu Arg Val His Tyr Gln Gly Ile Ser Gly Thr Arg Xaa His Ser Leu His Gln Phe Leu Arg Val Leu 35 <210> 1290 <211> 266 <212> PRT <213> Homo sapiens <400> 1290 Asp Ile Met Glu Ser Gly Phe Thr Ser Lys Asp Thr Tyr Leu Ser His 10 Phe Asn Pro Arg Asp Tyr Leu Glu Lys Tyr Tyr Lys Phe Gly Ser Arg

His	: Ser	Ala 35		Ser	Gln	Ile	Leu 40	-	His	Leu	Leu	Lys 45		Leu	Phe
Lys	Ile 50		: Cys	Leu	Asp	Gly 55		Lys	Gly	' Asp	Leu 60		Ile	Asp	Ile
Gly 65		Gly	Pro	Thr	Ile 70	_	Gln	Leu	Leu	Ser 75		Cys	Glu	Ser	Phe 80
Lys	Glu	Ile	Val	Val 85	Thr	Ąsp	Tyr	Ser	Asp 90		Asn	Leu	Gln	Glu 95	Leu
Glu	Lys	Trp	Leu 100	Lys	Lys	Glu	Pro	Glu 105		Phe	Asp	Trp	Ser 110	Pro	Val
Val	Thr	Tyr 115		Cys	Asp	Leu	Glu 120	Gly	Asn	Arg	Val	Lys 125	Gly	Pro	Glu
Lys	Glu 130	Glu	Lys	Leu	Arg	Gln 135	Ala	Val	Lys	Gln	Val 140	Leu	Lys	Cys	Asp
Val 145	Thr	Gln	Ser	Gln	Pro 150	Leu	Gly	Ala	Val	Pro 155	Leu	Pro	Pro	Ala	Asp 160
Cys	Val	Leu	Ser	Thr 165	Leu	Суѕ	Leu	Asp	Ala 170	Ala	Суз	Pro	Asp	Leu 175	Pro
Thr	Tyr	Cys	Arg 180	Ala	Leu	Arg	Asn	Leu 185	Gly	ser	Leu	Leu	Lys 190	Pro	Gly
Gly	Phe	Leu 195	Val	Ile	Met	Asp	Ala 200	Leu	Lys	Ser	Ser	Tyr 205	Tyr	Met	Ile
Gly	Glu 210	Gln	Lys	Phe	Ser	Ser 215	Leu	Pro	Leu	Gly	Arg 220	Glu	Ala	Val	Glu
Ala 225	Ala	Val	Lys	Glu	Ala 230	Gly	Tyr	Thr	Ile	Glu 235	Trp	Phe	Glu	Val	11e 240
Ser	Gln	Ser	Tyr	Ser 245	Ser	Thr	Met	Ala	Asn 250	Asn	Glu	Gly	Leu	Phe 255	ser
Leu	Val	Ala	Arg 260	Lys	Leu	Ser	Arg	Pro 265	Leu						

<210> 1291

<211> 112

<212> PRT

<213> Homo sapiens

<210> 1292 <211> 217 <212> PRT <213> Homo sapiens

<400> 1292

Gly Ser Thr His Ala Ser Gly Thr Met Arg Ala Ala Ile Ser Thr 1 5 10 15

105

Pro Lys Leu Asp Lys Met Pro Gly Met Phe Phe Ser Ala Asn Pro Lys
20 25 30

Glu Leu Lys Gly Thr Thr His Ser Leu Leu Asp Asp Lys Met Gln Lys 35 40 45

Arg Arg Pro Lys Thr Phe Gly Met Asp Met Lys Ala Tyr Leu Arg Ser 50 55 60

Met Ile Pro His Leu Glu Ser Gly Met Lys Ser Ser Lys Ser Lys Asp 70 65 75 Val Leu Ser Ala Ala Glu Val Met Gln Trp Ser Gln Ser Leu Glu Lys 90 Leu Leu Ala Asn Gln Thr Gly Gln Asn Val Phe Gly Ser Phe Leu Lys 105 Ser Glu Phe Ser Glu Glu Asn Ile Glu Phe Trp Leu Ala Cys Glu Asp 120 Tyr Lys Lys Thr Glu Ser Asp Leu Leu Pro Cys Lys Ala Glu Glu Ile 135 Tyr Lys Ala Phe Val His Ser Asp Ala Ala Lys Gln Ile Asn Ile Asp 150 Phe Arg Thr Arg Glu Ser Thr Ala Lys Lys Ile Lys Ala Pro Thr Pro 170 Thr Cys Phe Asp Glu Ala Gln Lys Val Ile Tyr Thr Leu Met Glu Lys 185 Asp Ser Tyr Pro Arg Phe Leu Lys Ser Asp Ile Tyr Leu Asn Leu Leu 200 Asn Asp Leu Gln Ala Asn Ser Leu Lys 215 <210> 1293 <211> 235 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (229) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1293 Leu His Leu Leu Ala Val Leu Glu Lys Met Ile Ser Gln Gly Asn Asn Asn Lys Asn Gly Lys Asn Glu Thr Gly Asn Asn Asn Asn Lys Asp Gly

Ser Asn His Lys Ala Glu Ser Gly Ala Leu Ile Glu Ala Ala Lys Ser 35 40 45

Lys Ile His Gln Tyr Lys Val Arg Ala Tyr Ile Gln Met Lys Ser Leu Lys Ala Cys Lys Arg Glu Ile Lys Ser Val Met Asn Thr Ala Gly Asn 65 70 75 Ser Ala Pro Ser Leu Phe Leu Lys Ser Asn Phe Glu Tyr Leu Arg Gly 90 Asn Tyr Arg Lys Ala Val Lys Leu Leu Asn Ser Ser Asn Ile Ala Glu 100 105 His Pro Gly Phe Met Lys Thr Gly Glu Cys Leu Arg Cys Met Phe Trp 120 Asn Asn Leu Gly Cys Ile His Phe Ala Met Ser Lys His Asn Leu Gly 135 Ile Phe Tyr Phe Lys Lys Ala Leu Gln Glu Asn Asp Asn Val Cys Ala 150 155 Gln Leu Ser Ala Gly Ser Thr Asp Pro Gly Lys Lys Phe Ser Gly Arg 165 170 Pro Met Cys Thr Leu Leu Thr Asn Lys Arg Tyr Glu Leu Leu Tyr Asn 185 Cys Gly Ile Gln Leu His Ile Gly Arg Pro Leu Ala Ala Phe Glu 195 200 Cys Leu Ile Glu Ala Val Gln Val Tyr His Ala Asn Pro Arg Leu Trp Leu Arg Leu Ala Xaa Met Leu His Cys Cys Gln 230 <210> 1294 <211> 275 <212> PRT <213> Homo sapiens

<223> Xaa equals any of the naturally occurring L-amino acids

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<221> SITE
<222> (23)

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PCT/US00/05882

WO 00/55350

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<22	:0>														
<22	1> 8	SITE													
	2> (
		. ,	equal	s an	y of	the	nat	ural	ly c	ccui	ring	L-2	minc	aci	.ds
<40	0> 1	294													
	Arg		Ala	Arg	_	Arg	Ala	Leu	Pro		ser	Gly	Lys	Ala 15	
Arg	Ala	Arg	Gly 20		Ala	Xaa	Gly	Ser 25		Ala	Arg	Gly	His	_	Se
Leu	Ala	Arg 35		Pro	Ala	Pro	Arg 40		Ser	His	Leu	Pro 45		. Arg	Arq
Xaa	Хаа 50		Arg	Val	Ser	Thr 55	Pro	Ile	Leu	Arg	Pro 60		Ser	Ser	Ile
Pro 65		Ala	Leu	Ser	Arg 70	Glu	Ser	Arg	Thr	Ala 75		Glu	Ser	Ser	Let 80
Thr	Pro	Gln	Pro	Gln 85	Val	Gly	Leu	Val	His 90		Met	Thr	Ser	Phe 95	Glu
Asp	Ala	Asp	Thr 100		Glu	Thr	Val	Thr 105	Cys	Leu	Gln	Met	Thr 110	Val	Туг
His	Pro	Gly 115		Leu	Gln	Cys	Gly 120	Ile	Phe	Gln	Ser	Ile 125	Ser	Phe	Asn
Arg	Glu 130		Leu	Pro	Ser	Ser 135	Glu	Val	Val	Lys	Phe 140	Gly	Arg	Asn	Ser
Asn l 45	Ile	Cys	His	Туг	Thr 150	Phe	Gln	Asp	Lys	Gln 155	Val	Ser	Arg	Val	Gln 160
Phe	ser	Leu	Gln	Leu 165	Phe	Lys	Lys	Phe	Asn 170	Ser	Ser	Val	Leu	Ser 175	Phe
lu	Ile	Lys	Asn 180	Met	Ser	Lys	Lys	Thr 185	Asn	Leu	Ile	Val	Asp 190	Ser	Arg
lu	Leu	Gly 195	Tyr	Leu	Asn	Lys	Met 200	Asp	Leu	Pro	Tyr	Arg 205	Сув	Met	Val
_	Phe	_	Glu	Tyr		Phe	Leu	Met		_	Glu 220	_	Gly	Glu	Ser

Leu Glu Phe Phe Glu Thr Gln Phe Ile Leu Ser Pro Arg Ser Leu Leu 225 Gln Glu Asn Asn Trp Pro Pro His Arg Pro Ile Pro Glu Tyr Gly Thr Tyr Ser Leu Cys Ser Ser Gln Ser Ser Ser Pro Thr Glu Met Asp Glu 265 Asn Glu Ser 275 <210> 1295 <211> 677 <212> PRT <213> Homo sapiens <220> <221> SITE <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (161) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1295 Met Thr Arg Leu Pro Lys Leu Trp Ala Arg Pro Ala Gly Lys Ala Leu Val Ser Pro Val Val Gln Asn Ile Thr Ser Pro Asp Glu Asp Gly Ile Ser Pro Leu Gly Trp Leu Leu Asp Gln Tyr Leu Glu Cys Gln Glu Ala Val Phe Asn Pro Gln Ser Arg Gly Pro Ala Phe Phe Ser Arg Val Arg 55 Arg Leu Thr His Leu Leu Val His Val Glu Pro Cys Glu Ala Pro Pro 70 Pro Val Val Ala Thr Pro Arg Pro Lys Gly Arg Asn Arg Ser His Asp

90

Trp Ser Ser Leu Ala Thr Arg Gly Leu Pro Ser Ser Ile Met Arg Asn 100 105 110

Let	ı Thi	11!		Tr _į	Arg	g Ala	a Val		l Gl	ı Lys	s Glr	n Val		n Ası	n Phe
Let	1 Thi		r Sei	Trg	Arç	135	o yat) Asi	Phe	∍ Val	140		д Туі	с Суя	s Xaa
His 145		e Ası	n Ile	e Leu	150		ı Ser	: Sei	: Sei	Glu 155		ı Phe	e Gly	, Pro	Arg 160
Xaa	Ala	Phe	e Leu	165		Leu	ı Gln	Asr	170		s Ala	a Gly	Ala	175	
Lys	Leu	Pro	180		Lys	Ala	a Ala	His 185		. Ser	Glu	Glr	190		Arg
His	Ile	195		Gln	Ile	Gln	Gly 200		Arg	; Ile	: Gly	Gly 205		Gln	Glu
Met	Glu 210		Leu	Ala	Gln	215	Gln	Gln	Cys	Leu	220		Val	. Leu	Ile
Phe 225		Gly	Leu	Glu	Ile 230		Thr	Thr	Phe	Glu 235		Туг	Tyr	Gln	His 240
Tyr	Met	Ala	Asp	Arg 245		Leu	Gly	Val	Val 250		Ser	Trp	Leu	Glu 255	
Ala	Val	Leu	Glu 260		Ile	Gly	Pro	Cys 265		Pro	Asn	Arg	Leu 270		Gln
Gln	Met	Leu 275		Ser	Leu	Ser	Thr 280	Ser	Lys	Glu	Leu	Gln 285	_	Gln	Phe
His	Val 290		Gln	Leu	Gln	Gln 295	Leu	Asp	Gln	Glu	Leu 300		Lys	Leu	Glu
Asp 305	Thr	Glu	Lys	Lys	11e 310	Gln	Val	Gly	Leu	Gly 315	Ala	Ser	Gly	Lys	Glu 320
His	Lys	Ser	Glu	Lys 325	Glu	Glu	Glu	Ala	Gly 330	Ala	Ala	Ala	Val	Val 335	Asp
Val	Ala	Glu	Gly 340	Glu	Glu	Glu	Glu	Glu 345	Glu	Asn	Glu	Asp	Leu 350	туг	Tyr
Glu	Gly	Ala 355	Met	Pro	Glu	Val	Ser 360	Val	Leu	Val	Leu	Ser 365	Arg	His	Ser
Trp	Pro 370	Val	Ala	Ser	Ile	Cys 375	His	Thr	Leu	Asn	Pro 380	Arg	Thr	Cys	Leu

Pro 385		ту1	r Lei	ı Arç	390 390		. Leu	ı Asr	a Arg	395		Asr	n Phe	ту1	400
Lys	s Sei	Glr	n Ser	His 405		Ala	a Leu	gly	410	_	, Sei	Glr	n Arg	415	
Glr	Trp	Thi	420		ı Gly	Trp	Ala	425		g Glr	Phe	e Gly	430		Thi
Leu	His	Val 435		Thr	Val	. Gln	Met 440	_	Leu	. Leu	Lev	445		Asn	ı Asp
Leu	450		val	. Ser	. Val	Glu 455	Ser	Leu	Leu	ı Ala	Phe 460		Gly	Leu	Ser
Ala 465		Met	: Leu	Asn	470		Ile	Gly	Pro	475		Ser	Ser	Arg	G1y 480
Pro	Leu	Asp	Leu	His 485		Gln	Lys	Asp	11e 490		Gly	Gly	Val	Leu 495	_
Ile	Arg	Asp	Gly 500		Lys	Glu	Pro	Arg 505		Arg	Trp	Asp	Ile 510		Arg
Leu	Ile	Pro 515		Gln	Thr	Tyr	Leu 520		Ala	Glu	Gly	Glu 525	Asp	Gly	Gln
Asn	Leu 530		Lys	Arg	Arg	Asn 535	Leu	Leu	Asn	Суз	Leu 540		Val	Arg	Ile
545					550		Gly			555					560
Leu	Val	Leu	Glu	Ala 565	Trp	Gln	Lys	Gly	Pro 570	Cys	Pro	Pro	Arg	Gly 575	Leu
Val	Ser	Ser	Leu 580	Gly	Lys	Gly	Ser	Ala 585	Суѕ	Ser	Ser	Thr	Asp 590	Val	Leu
Ser	Cys	Ile 595	Leu	His	Leu	Leu	Gly 600	Lys	Gly	Thr	Leu	Arg 605	Arg	His	Asp
	610					615	Tyr				620				
Pro 625	His	Thr	Glu	Ser	Leu 630	Asn	Pro	Gly	Ser	Ser 635	Gly	Pro	Asn	Pro	Pro 640
Leu	Thr	Phe	His	Thr 645	Leu	Gln	Ile	Arg	Ser 650	Arg	Gly	Val	Pro	Tyr 655	Ala

Ser Cys Thr Ala Thr Gln Ser Phe Ser Thr Ser Gly Ser Pro Arg Leu 660 665 670

Gly Val Arg Gly Arg 675

<210> 1296

<211> 578

<212> PRT

<213> Homo sapiens

<400> 1296

Gly Thr Arg Glu Gly Ala Arg Val Gly Gly Ala Arg Gly Gly Arg Asp 1 5 10 15

Gly Arg Lys Met Ala Thr Ala Thr Ile Ala Leu Gln Val Asn Gly Gln 20 25 30

Gln Gly Gly Ser Glu Pro Ala Ala Ala Ala Ala Val Val Ala Ala 35 40 45

Gly Asp Lys Trp Lys Pro Pro Gln Gly Thr Asp Ser Ile Lys Met Glu 50 55 60

Asn Gly Gln Ser Thr Ala Ala Lys Leu Gly Leu Pro Pro Leu Thr Pro 65 70 75 80

Glu Gln Glu Ala Leu Gln Lys Ala Lys Lys Tyr Ala Met Glu Gln 85 90 95

Ser Ile Lys Ser Val Leu Val Lys Gln Thr Ile Ala His Gln Gln Gln 100 105 110

Gln Leu Thr Asn Leu Gln Met Ala Ala Val Thr Met Gly Phe Gly Asp 115 120 125

Pro Leu Ser Pro Leu Gln Ser Met Ala Ala Gln Arg Gln Arg Ala Leu 130 135 140

Ala Ile Met Cys Arg Val Tyr Val Gly Ser Ile Tyr Tyr Glu Leu Gly 145 150 155 160

Glu Asp Thr Ile Arg Gln Ala Phe Ala Pro Phe Gly Pro Ile Lys Ser 165 170 175

Ile Asp Met Ser Trp Asp Ser Val Thr Met Lys His Lys Gly Phe Ala

Phe Val Glu Tyr Glu Val Pro Glu Ala Ala Gln Leu Ala Leu Glu Gln

		195	5				200)				205	5		
Met	210		. Val	. Met	Leu	Gly 215	_	Arg	, Asr	ı Ile	220		i Gly	Arç	g Pro
Ser 225		ıle	gly	Gln	Ala 230		Pro) Ile	: Ile	235		Let	ı Ala	Glu	Glu 240
Ala	Arg	Ala	Phe	245	-	Ile	туг	· Val	. Ala 250		Val	. His	Gln	Asp 255	
Ser	Asp	Asp	260	Ile	Lys	ser	Val	Phe 265		a Ala	Phe	Gly	Lys 270		Lys
Ser	Cys	Thr 275		Ala	Arg	Asp	280		Thr	Gly	Lys	His 285	_	Gly	Туг
Gly	Phe 290		Glu	Tyr	Glu	Lys 295		Gln	Ser	ser	Gln 300	_	Ala	Val	Ser
Ser 305	Met	Asn	Leu	Phe	Asp 310	Leu	Gly	Gly	Gln	Tyr 315		Arg	Val	Gly	Lys 320
Ala	Val	Thr	Pro	Pro 325	Met	Pro	Leu	Leu	Thr		Ala	Thr	Pro	Gly 335	-
Leu	Pro	Pro	Ala 340	Ala	Ala	Val	Ala	Ala 345	Ala	Ala	Ala	Thr	Ala 350	Lys	Ile
Thr	Ala	G1n 355		Ala	Val	Ala	Gly 360	Ala	Ala	val	Leu	Gly 365	Thr	Leu	Gly
Thr	Pro 370	G1y	Leu	Val	Ser	Pro 375	Ala	Leu	Thr	Leu	Ala 380	Gln	Pro	Leu	Gly
Thr 385	Leu	Pro	Gln	Ala	Val 390	Met	Ala	Ala	Gln	Ala 395	Pro	Gly	Val		Thr 400
Gly	Val	Thr	Pro	Ala 405	Arg	Pro	Pro	Ile	Pro 410	Val	Thr	Ile	Pro	Ser 415	Val
Gly	Val	Val	Asn 420	Pro	Ile	Leu	Ala	Ser 425	Pro	Pro	Thr	Leu	Gly 430	Leu	Leu
Glu	Pro	Lys 435	Lys	Glu	Lys	Glu	Glu 440	Glu	Glu	Leu	Phe	Pro 445	G1u	Ser	Glu
Arg	Pro 450	Glu	Met	Leu	Ser	Glu 455	Gln	Glu	His	Met	Ser 460	Ile	Ser	Gly	Ser
Ser	Ala	Arg	His	Met	Val	Met	Gln	Lys	Leu	Leu	Arg	Lys	Gln	Glu	Ser

1334

465 470 475 480 Thr Val Met Val Leu Arg Asn Met Val Asp Pro Lys Asp Ile Asp Asp 490 Asp Leu Glu Gly Glu Val Thr Glu Glu Cys Gly Lys Phe Gly Ala Val Asn Arg Val Ile Ile Tyr Gln Glu Lys Gln Gly Glu Glu Asp Ala Glu Ile Ile Val Lys Ile Phe Val Glu Phe Ser Ile Ala Ser Glu Thr 535 His Lys Ala Ile Gln Ala Leu Asn Gly Arg Trp Phe Ala Gly Arg Lys 550 555 Val Val Ala Glu Val Tyr Asp Gln Glu Arg Phe Asp Asn Ser Asp Leu 565 570 Ser Ala <210> 1297 <211> 179 <212> PRT <213> Homo sapiens <400> 1297 Pro Arg Gly Thr Ser Arg Arg Ser Ala Trp Pro Lys Met Ala Ala Ser Val Cys Ser Gly Leu Leu Gly Pro Arg Val Leu Ser Trp Ser Arg Glu Leu Pro Cys Ala Trp Arg Ala Leu His Thr Ser Pro Val Cys Ala Lys 40 Asn Arg Ala Ala Arg Val Arg Val Ser Lys Gly Asp Lys Pro Val Thr 55 Tyr Glu Glu Ala His Ala Pro His Tyr Ile Ala His Arg Lys Gly Trp 70 Leu Ser Leu His Thr Gly Asn Leu Asp Gly Glu Asp His Ala Ala Glu Arg Thr Val Glu Asp Val Phe Leu Arg Lys Phe Met Trp Gly Thr Phe

Pro Gly Cys Leu Ala Asp Gln Leu Val Leu Lys Arg Arg Gly Asn Gln 120 Leu Glu Ile Cys Ala Val Val Leu Arg Gln Leu Ser Pro His Lys Tyr Tyr Phe Leu Val Gly Tyr Ser Glu Thr Leu Leu Ser Tyr Phe Tyr Lys Cys Pro Val Arg Leu His Leu Gln Thr Val Pro Ser Lys Val Val Tyr 165 170 Lys Tyr Leu <210> 1298 <211> 155 <212> PRT <213> Homo sapiens <400> 1298 Gly Leu Val Thr Ile Phe Gly Cys Pro Ser Arg Glu Lys Gly Arg Met Pro Leu Glu Ser Ser Ser Ser Met Pro Leu Ser Phe Pro Ser Leu Leu 25 Pro Ser Val Pro His Asn Thr Asn Pro Ser Pro Pro Leu Met Ser Tyr Ile Thr Ser Gln Glu Met Lys Cys Ile Leu His Trp Phe Ala Asn Trp

Tyr Gln Ala Val Ala Ala Thr Ala Gly Lys Asp 145 150 155

<210> 1299

<211> 449

<212> PRT

<213> Homo sapiens

<400> 1299

Ser Asn Arg Lys Phe Ile Pro His Gln Leu Leu Val Ala Ile Asp Leu l 5 10 15

Leu Ala Arg Gln Ala Val Arg Tyr Ile Asn Glu Asn Leu Ile Val Asn 20 25 30

Thr Asp Glu Leu Gly Arg Asp Cys Leu Ile Asn Ala Ala Lys Thr Ser 35 40 45

Met Ser Ser Lys Ile Ile Gly Ile Asn Gly Asp Phe Phe Ala Asn Met 50 60

Val Val Asp Ala Val Leu Ala Ile Lys Tyr Thr Asp Ile Arg Gly Gln 65 70 75 80

Pro Arg Tyr Pro Val Asn Ser Val Asn Ile Leu Lys Ala His Gly Arg 85 90 95

Ser Gln Met Glu Ser Met Leu Ile Ser Gly Tyr Ala Leu Asn Cys Val 100 105 110

Val Gly Ser Gln Gly Met Pro Lys Arg Ile Val Asn Ala Lys Ile Ala 115 120 125

Cys Leu Asp Phe Ser Leu Gln Lys Thr Lys Met Lys Leu Gly Val Gln 130 135 140

Val Val Ile Thr Asp Pro Glu Lys Leu Asp Gln Ile Arg Gln Arg Glu 145 150 155 160

Ser Asp Ile Thr Lys Glu Arg Ile Gln Lys Ile Leu Ala Thr Gly Ala 165 170 175

Asn Val Ile Leu Thr Thr Gly Gly Ile Asp Asp Met Cys Leu Lys Tyr 180 185 190

Phe Val Glu Ala Gly Ala Met Ala Val Arg Arg Val Leu Lys Arg Asp 195 200 205

Leu Lys Arg Ile Ala Lys Ala Ser Gly Ala Thr Ile Leu Ser Thr Leu

1337

	210					215					220				
Ala 225		Leu	Glu	Gly	Glu 230		Thr	Phe	Glu	Ala 235		Met	Leu	Gly	Gl:
Ala	Glu	Glu	Val	Val 245		Glu	Arg	Ile	Cys 250	_	Asp	Glu	Leu	11e 255	
Ile	Lys	Asn	Thr 260	Lys	Ala	Arg	Thr	Ser 265		Ser	Ile	Ile	Leu 270	-	Gly
Ala	Asn	Asp 275	Phe	Met	Cys	Asp	Glu 280	Met	Glu	Arg	Ser	Leu 285	His	Asp	Ala
Leu	Суз 290	Val	Val	Lys	Arg	Val 295	Leu	Glu	Ser	Lys	Ser 300	Val	Val	Pro	Gly
Gly 305		Ala	Val	Glu	Ala 310	Ala	Leu	Ser	Ile	Туг 315	Leu	Glu	Asn	Tyr	Ala 320
Thr	Ser	Met	Gly	Ser 325	Arg	Glu	Gln	Leu	Ala 330	Ile	Ala	Glu	Phe	Ala 335	Arc
Ser	Leu	Leu	Val 340	Ile	Pro	Asn	Thr	Leu 345	Ala	Val	Asn	Ala	Ala 350	Gln	Asp
Ser	Thr	Asp 355	Leu	Val	Ala	Lys	Leu 360	Arg	Ala	Phe	His	Asn 365	Glu	Ala	Gln
Val	Asn 370	Pro	Glu	Arg	Lys	Asn 375	Leu	Lys	Trp	Ile	Gly 380	Leu	Asp	Leu	Ser
Asn 385	Gly	Lys	Pro	Arg	Asp 390	Asn	Lys	Gln	Ala	Gly 395	Val	Phe	Glu	Pro	Thr 400
Ile	Val	Lys	Val	Lys 405	Ser	Leu	Lys	Phe	Ala 410	Thr	Glu	Ala	Ala	Ile 415	Thr
Ile	Leu	Arg	Ile 420	Asp	Asp	Leu	Ile	Lys 425	Leu	His	Pro	Glu	Ser 430	Lys	Asp
Asp	Lys	His 435	Gly	Ser	Tyr	Glu	Asp 440	Ala	Val	His	Ser	Gly 445	Ala	Leu	Asn
Asp															

<210> 1300 <211> 96

1338

<212> PRT

<213> Homo sapiens

<400> 1300

Leu Met Phe Tyr Val Leu Phe Trp Thr Leu Ser Ser Cys Lys Asn Phe 1 5 10 15

Tyr Lys Asn Cys Phe Leu His Pro Cys Gly Ala Tyr Ser Ser Glu Pro $20 \hspace{1cm} 25 \hspace{1cm} 30$

Ser Pro Gln Ser Gln Cys Leu Cys Phe Leu Phe Tyr Phe Cys Ser Ile $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Arg Phe Leu Leu Leu Cys Leu Lys Ser Ser Leu Gly Ser Tyr Gln 50 60

Gly Phe Ser Phe Cys Val Ala Phe Ala Ala Trp Ile Lys His Trp Leu 65 70 75 80

Thr Val Leu Met Cys Glu Glu Lys Lys Phe Ser Lys Ala Gly Glu Leu 85 90 95

<210> 1301

<211> 332

<212> PRT

<213> Homo sapiens

<400> 1301

Gly Glu Pro Lys Met Thr Gly Ser Asn Glu Phe Lys Leu Asn Gln Pro 1 5 10 15

Pro Glu Asp Gly fle Ser Ser Val Lys Phe Ser Pro Asn Thr Ser Gln 20 25 30

Phe Leu Leu Val Ser Ser Trp Asp Thr Ser Val Arg Leu Tyr Asp Val
35 40 45

Pro Ala Asn Ser Met Arg Leu Lys Tyr Gln His Thr Gly Ala Val Leu
50 60

Asp Cys Ala Phe Tyr Asp Pro Thr His Ala Trp Ser Gly Gly Leu Asp 65 70 75 80

His Gln Leu Lys Met His Asp Leu Asn Thr Asp Gln Glu Asn Leu Val

Gly	Thr	His	Asp 100		Pro	Ile	Arg	Cys 105	Val	Glu	Tyr	Cys	Pro 110		Val	
Asn	Val	Met 115		Thr	Gly	Ser	Trp 120	Asp	Gln	Thr	Val	Lys 125		Trp	Asp	
Pro	Arg 130		Pro	Cys	Asn	Ala 135	Gly	Thr	Phe	Ser	Gln 140	Pro	Glu	Lys	Val	
Tyr 145	Thr	Leu	Ser	Val	Ser 150	Gly	Asp	Arg	Leu	Ile 155	Val	Gly	Thr	Ala	Gly 160	
Arg	Arg	Val	Leu	Val 165	Trp	Asp	Leu	Arg	Asn 170	Met	Gly	Туr	Val	Gln 175	Gln	
Arg	Arg	Glu	Ser 180	Ser	Leu	Lys	Tyr	Gln 185	Thr	Arg	Cys	Ile	Arg 190	Ala	Phe	
Pro	Asn	Lys 195	Gln	Gly	Tyr	Val	Leu 200	Ser	Ser	Ile	Glu	Gly 205	Arg	Val	Ala	
Val	Glu 210	Tyr	Leu	Asp	Pro	Ser 215	Pro	Glu	Val	Gln	Lys 220	Lys	Lys	Tyr	Ala	
Phe 225	Lys	Cys	His	Arg	Leu 230	Lys	Glu	Asn	Asn	Ile 235	Glu	Gln	Ile	Tyr	Pro 240	
Val	Asn	Ala	Ile	Ser 245	Phe	His	Asn	Ile	His 250	Asn	Thr	Phe	Ala	Thr 255	Gly	
Gly	Ser	Asp	Gly 260	Phe	Val	Asn	Ile	Trp 265	Asp	Pro	Phe	Asn	Lys 270	Lys	Arg	
Leu	Cys	Gln 275	Phe	His	Arg	Tyr	Pro 280	Thr	Ser	Ile	Ala	Ser 285	Leu	Ala	Phe	
Ser	Asn 290	Asp	Gly	Thr	Thr	Leu 295	Ala	Ile	Ala	Ser	Ser 300	Tyr	Met	Tyr	Glu	
Met 305	Asp	Asp	Thr	Glu	His 310	Pro	Glu	Asp	G1y	11e 315	Phe	Ile	Arg	Gln	Val 320	

Thr Asp Ala Glu Thr Lys Pro Lys Ser Pro Cys Thr

325

<210> 1302

<211> 565

<212> PRT

<213> Homo sapiens

Leu His Cys Thr Met Cys Gly Ile Trp Ala Leu Phe Gly Ser Asp Asp Cys Leu Ser Val Gln Cys Leu Ser Ala Met Lys Ile Ala His Arg Gly 25 Pro Asp Ala Phe Arg Phe Glu Asn Val Asn Gly Tyr Thr Asn Cys Cys Phe Gly Phe His Arg Leu Ala Val Val Asp Pro Leu Phe Gly Met Gln Pro Ile Arg Val Lys Lys Tyr Pro Tyr Leu Trp Leu Cys Tyr Asn Gly Glu Ile Tyr Asn His Lys Lys Met Gln Gln His Phe Glu Phe Glu Tyr 90 Gln Thr Lys Val Asp Gly Glu Ile Ile Leu His Leu Tyr Asp Lys Gly 100 105 Gly Ile Glu Gln Thr Ile Cys Met Leu Asp Gly Val Phe Ala Phe Val 120 Leu Leu Asp Thr Ala Asn Lys Lys Val Phe Leu Gly Arg Asp Thr Tyr 135 Gly Val Arg Pro Leu Phe Lys Ala Met Thr Glu Asp Gly Phe Leu Ala 155 150 Val Cys Ser Glu Ala Lys Gly Leu Val Thr Leu Lys His Ser Ala Thr Pro Phe Leu Lys Val Glu Pro Phe Leu Pro Gly His Tyr Glu Val Leu 185 Asp Leu Lys Pro Asn Gly Lys Val Ala Ser Val Glu Met Val Lys Tyr 200 His His Cys Arg Asp Glu Pro Leu His Ala Leu Tyr Asp Asn Val Glu 215 Lys Leu Phe Pro Gly Phe Glu Ile Glu Thr Val Lys Asn Asn Leu Arg Ile Leu Phe Asn Asn Ala Val Lys Lys Arg Leu Met Thr Asp Arg Arg

Ile Gly Cys Leu Leu Ser Gly Gly Leu Asp Ser Ser Leu Val Ala Ala

			260					265					270		
Thr	Leu	Leu 275	-	Gln	Leu	Lys	Glu 280		Gln	Val	Gln	Туг 285	Pro	Leu	Glm
Thr	Phe 290		. Ile	Gly	Met	Glu 295	-	Ser	Pro	Asp	Leu 300		Ala	Ala	Arg
Lys 305	Val	Ala	Asp	His	Ile 310		Ser	Glu	His	Туг 315		Val	Leu	Phe	320
Ser	Glu	Glu	Gly	Ile 325		Ala	Leu	Asp	Glu 330		Ile	Phe	Ser	Leu 335	
Thr	Tyr	Asp	Ile 340	Thr	Thr	Val	Arg	Ala 345		Val	Gly	Met	Туг 350	Leu	Ile
Ser	Lys	Tyr 355	Ile	Arg	Lys	Asn	Thr 360	Asp	Ser	Val	Val	11e 365	Phe	Ser	Gly
Glu	Gly 370		Asp	Glu	Leu	Thr 375		Gly	Tyr	Ile	туr 380	Phe	His	Lys	Ala
Pro 385	ser	Pro	Glu	Lys	Ala 390	Glu	Glu	Glu	Ser	Glu 395	Arg	Leu	Leu	Arg	Glu 400
Leu	Tyr	Leu	Phe	Asp 405	Val	Leu	Arg	Ala	Asp 410	Arg	Thr	Thr	Ala	Ala 415	His
Gly	Leu	Glu	Leu 420	Arg	Val	Pro	Phe	Leu 425	Asp	His	Arg	Phe	Ser 430	Ser	Tyr
Tyr	Leu	Ser 435	Leu	Pro	Pro	Glu	Met 440	Arg	Ile	Pro	Lys	Asn 445	Gly	Ile	Glu
Lys	His 450	Leu	Leu	Arg	Glu	Thr 455	Phe	Glu	Asp	Ser	Asn 460	Leu	Ile	Pro	Lys
Glu 465	Ile	Leu	Trp	Arg	Pro 470	Lys	Glu	Ala	Phe	Ser 475	Asp	Gly	Ile	Thr	Ser 480
Val	Lys	Asn	Ser	Trp 485	Phe	Lys	Ile	Leu	Gln 490	Glu	Tyr	Val	Glu	His 495	Gln
Val	Asp	Asp	Ala 500	Met	Met	Ala	Asn	Ala 505	Ala	Gln	Lys	Phe	Pro 510	Phe	Asn
Phr	Pro	Lys 515	Thr	Lys	Glu	Gly	Tyr 520	_	Tyr	Arg	Gln	Val 525	Phe	Glu	Arg
lis	Tyr	Pro	Gly	Arg	Ala	Asp	Trp	Leu	Ser	His	Tyr	Trp	Met	Pro	Lys

	53	0				535	5				540)			
Tr:		e As:	n Ala	a Thi	550		Sei	c Ala	a Arç	7 Thi 55		ı Thi	r His	тух	Lys 560
Sei	c Ala	a Vai	l Lys	5 Ala											
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			g Arg	, Ala 5		Arg	, Ser	· Ala	Glu 10	_	Thr	Gly	Leu	Arg 15	
Leu	Leu	ı Lev	Pro 20		Arg	Leu	Gln	Leu 25		Ala	Gly	Pro	Phe 30	Ser	Arg
Cys	Arg	Trp 35		Pro	Val	Ser	Ser 40		Arg	Pro	Ser	Thr 45	Met	Pro	Pro
Lys	Lys 50		Gly	Asp	Gly	Ile 55		Pro	Pro	Pro	Ile 60		Gly	Arg	Phe
Gly 65		Ser	Leu	Lys	Ile 70	Gly	Ile	Val	Gly	Leu 75	Pro	Asn	Val	Gly	Lys 80
Ser	Thr	Phe	Phe	Asn 85	Val	Leu	Thr	Asn	Ser 90	Gln	Ala	Ser	Ala	Glu 95	Asn
Phe	Pro	Phe	Cys 100	Thr	Ile	Asp	Pro	Asn 105	Glu	Ser	Arg	Val	Pro	Val	Pro
Asp	Glu	Arg 115	Phe	Asp	Phe	Leu	Cys 120	Gln	Tyr	His	Lys	Pro 125	Ala	Ser	Lys
Ile	Pro 130	Ala	Phe	Leu	Asn	Val 135	Val	Asp	Ile	Ala	Gly 140	Leu	Val	Lys	Gly
Ala 145	His	Asn	Gly	Gln	Gly 150	Leu	Gly	Asn	Ala	Phe 155	Leu	Ser	His	Ile	Ser 160
Ala	Cys	Asp	Gly	Ile 165	Phe	His	Leu	Thr	Arg 170	Ala	Phe	Glu	Asp	Asp 175	Asp
Ile	Thr	His	Val 180	Glu	Gly	Ser	Val	Asp 185	Pro	Ile	Arg	Asp	Ile 190	Glu	Ile

Ile	His	Glu 195		ı Leu	Gln	Leu	Lys 200	_	Glu	Glu	Met	11e 205	_	Pro	Ile
Ile	Asp 210		Leu	Glu	Lys	Val 215		Val	Arg	Gly	Gly 220		Lys	Lys	Leu
Lys 225		Glu	Туг	Asp	11e 230	Met	Cys	Lys	Val	Lys 235		Trp	Val	Ile	Asp 240
Gln	Lys	Lys	Pro	Val 245	Arg	Phe	Tyr	His	Asp 250	-	Asn	Asp	Lys	Glu 255	Ile
Glu	Val	Leu	Asn 260		His	Leu	Phe	Leu 265		Ser	Lys	Pro	Met 270	Val	Tyr
Leu	Val	Asn 275	Leu	Ser	Glu	Lys	Asp 280	Tyr	Ile	Arg	Lys	Lys 285	Asn	Lys	Trp
Leu	Ile 290	Lys	Ile	Lys	Glu	Trp 295	Val	Asp	Lys	Tyr	Asp 300	Pro	Gly	Ala	Leu
Val 305	Ile	Pro	Phe	Ser	Gly 310	Ala	Leu	Glu	Leu	Lys 315	Leu	Gln	Glu	Leu	Ser 320
Ala	Glu	Glu	Arg	Gln 325	Lys	Tyr	Leu	Glu	Ala 330	Asn	Met	Thr	Gln	Ser 335	Ala
Leu	Pro	Lys	Ile 340	Ile	Lys	Ala	Gly	Phe 345	Ala	Ala	Leu	Gln	Leu 350	Glu	Tyr
Phe	Phe	Thr 355	Ala	Gly	Pro	Asp	Glu 360	Val	Arg	Ala	Trp	Thr 365	Ile	Arg	Lys
Gly	Thr 370	Lys	Ala	Pro	Gln	Ala 375	Ala	Gly	Lys	Ile	His 380	Thr	Asp	Phe	Glu
Lys 385	Gly	Phe	Ile	Met	Ala 390	Glu	Val	Met	Lys	Туг 395	Glu	Asp	Phe	Lys	Glu 400
31u	Gly	Ser	Glu	Asn 405	Ala	Val	Lys	Ala	Ala 410	Gly	Lys	Tyr	Arg	Gln 415	Gln
31y	Arg	Asn	Tyr 420	Ile	Val	Glu	Asp	Gly 425	Asp	Ile	Ile	Phe	Phe. 430	Lys	Phe

Asn Thr Pro Gln Gln Pro Lys Lys 435 440

<210> 1304

<211> 94

<212> PRT

<213> Homo sapiens

<400> 1304

Glu Lys Lys Arg Gly Arg Glu Asp Lys Pro Gly Thr Met Ala Thr Phe 1 5 10 15

Pro Pro Ala Thr Ser Ala Pro Gln Gln Pro Pro Gly Pro Glu Asp Glu 20 25 30

Asp Ser Ser Leu Asp Glu Ser Asp Leu Tyr Ser Leu Ala His Ser Tyr 35 40 45

Leu Gly Gly Gly Arg Lys Gly Arg Thr Lys Arg Glu Ala Ala Ala 50 55 60

Asn Thr Asn Arg Pro Ser Pro Gly Gly His Glu Arg Lys Leu Val Thr 65 70 75 80

Lys Leu Gln Asn Ser Glu Arg Lys Lys Arg Gly Ala Arg Arg 85 90

<210> 1305

<211> 82

<212> PRT

<213> Homo sapiens

<400> 1305

Val Ile Leu Glu Met Val Ile Val Phe Cys Leu Val Thr Phe Ala Thr

Val Pro Phe Lys Thr Met Trp Lys Pro Gln Val Cys Gly Gln His Arg 20 25 30

Trp Asn Asp Ile Leu Cys Phe Leu Arg Leu Pro Ser Thr Arg His Ile 35 40 45

Ser Leu Val Leu Gln Met Ser Ala Gln Val Leu Val Thr Ser Phe Ser 50 55 60

Cys Cys Pro Gly Lys Ser Val Cys Ala Gly Ala Gly Ala Leu Ala Leu 65 70 75 80

Phe Arg

<210> 1306 <211> 231 <212> PRT <213> Homo sapiens <400> 1306 Ala Arg Glu Met Ala Ala Gln Gln Arg Asp Cys Gly Gly Ala Ala Gln 10 Leu Ala Gly Pro Ala Ala Glu Ala Asp Pro Leu Gly Arg Phe Thr Cys 25 Pro Val Cys Leu Glu Val Tyr Glu Lys Pro Val Gln Val Pro Cys Gly His Val Phe Cys Ser Ala Cys Leu Gln Glu Cys Leu Lys Pro Lys Lys Pro Val Cys Gly Val Cys Arg Ser Ala Leu Ala Pro Gly Val Arg Ala Val Glu Leu Glu Arg Gln Ile Glu Ser Thr Glu Thr Ser Cys His Gly 85 Cys Arg Lys Asn Phe Phe Leu Ser Lys Ile Arg Ser His Val Ala Thr 105 Cys Ser Lys Tyr Gln Asn Tyr Ile Met Glu Gly Val Lys Ala Thr Ile 120 Lys Asp Ala Ser Leu Gln Pro Arg Asn Val Pro Asn Arg Tyr Thr Phe 135 Pro Cys Pro Tyr Cys Pro Glu Lys Asn Phe Asp Gln Glu Gly Leu Val 145 150 Glu His Cys Lys Leu Phe His Ser Thr Asp Thr Lys Ser Val Val Cys 165 170 Pro Ile Cys Ala Ser Met Pro Trp Gly Asp Pro Asn Tyr Arg Ser Ala 180 185 Asn Phe Arg Glu His Ile Gln Arg Arg His Arg Phe Ser Tyr Asp Thr 200 Phe Val Asp Tyr Asp Val Asp Glu Glu Asp Met Met Asn Gln Val Leu Gln Arg Ser Ile Ile Asp Gln

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Gln 1	Lys	Gln	Arg	Thr 5	Phe	Trp	ГÀЗ	Tyr	Tyr 10	-	Asp	Gly	Lys	Asp 15	Ту
Ile	Glu	Phe	Asn 20	-	Glu	Ile	Pro	Ala 25	_	Val	Pro	Phe	Asp 30	Pro	Ala
Ala	Gln	Ile 35	Thr	Lys	Gln	Lys	Trp	Glu	Ala	Glu	Pro	Val 45	Tyr	Val	Glı
Arg	Ala 50	Lys	Ala	Tyr	Leu	Glu 55	Glu	Glu	Cys	Pro	Ala 60	Thr	Leu	Arg	Lys
Tyr 65	Leu	Lys	Tyr	Ser	Lys 70	Asn	Ile	Leu	Asp	Arg 75	Gln	Asp	Pro	Pro	Sei 80
Val	Val	Val	Thr	ser 85	His	Gln	Ala	Pro	Gly 90	Glu	Lys	Lys	Lys	Leu 95	Lys
Cys	Leu	Ala	Tyr 100	Asp	Phe	Tyr	Pro	Gly 105	Lys	Ile	Asp	Val	His 110	Trp	Thr
Arg	Ala	Gly 115	Glu	Val	Gln	Glu	Pro 120	Glu	Leu	Arg	Gly	Asp 125	Val	Leu	His
Asn	Gly 130	Asn	Gly	Thr	Tyr	Gln 135	Ser	Trp	Val	Val	Val 140	Ala	Väl	Pro	Pro
Gln 145	Asp	Thr	Ala	Pro	Tyr 150	Ser	Суз	His	Val	Gln 155	His	Ser	Ser	Leu	Ala 160
Gln	Pro	Leu	Val	Val 165	Pro	Trp	Glu	Ala	Ser 170						

<210> 1308

<211> 111

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

Tyr Leu Gly Glu Phe Ser Ile Thr Tyr Lys Pro Val Lys His Xaa Arg

Pro Gly Ile Gly Ala Thr His Xaa Ser Arg Phe Ile Pro Leu Lys \$100\$ 105 110

<210> 1309 <211> 121

<212> PRT <213> Homo sapiens

<400> 1309

Pro Val Ser Pro Gln Glu Arg Pro Pro Pro Tyr Leu Ala Val Pro Gly
1 5 10 15

His Gly Glu Glu Tyr Pro Val Ala Gly Ala His Ser Ser Pro Pro Lys 20 25 30

Ala Arg Phe Leu Arg Val Pro Ser Glu His Pro Tyr Leu Thr Pro Ser 35 40 45

Pro Glu Ser Pro Glu His Trp Ala Ser Pro Ser Pro Pro Ser Leu Ser 50 55 60

Asp Trp Ser Glu Ser Thr Pro Ser Pro Ala Thr Ala Thr Gly Ala Met

1348

70 80 65 Ala Thr Thr Gly Ala Leu Pro Ala Gln Pro Leu Pro Leu Ser Val 90 Pro Ser Ser Leu Ala Gln Ala Gln Thr Gln Leu Gly Pro Gln Pro Glu 105 Val Thr Pro Lys Arg Gln Val Leu Ala 115 <210> 1310 <211> 206 <212> PRT <213> Homo sapiens <400> 1310 Gln Cys Pro Gly Arg Ala Gly Ala Pro Gln Thr Arg Ala Pro Arg Ala 10 Arg Glu Arg Gly Gly Ala Met Ala Thr Ala Asn Gly Ala Val Glu Asn 20 25 Gly Gln Pro Asp Arg Lys Pro Pro Ala Leu Pro Arg Pro Ile Arg Asn 40 Leu Glu Val Lys Phe Thr Lys Ile Phe Ile Asn Asn Glu Trp His Glu Ser Lys Ser Gly Lys Lys Phe Ala Thr Cys Asn Pro Ser Thr Arg Glu Gln Ile Cys Glu Val Glu Glu Gly Asp Lys Pro Asp Val Asp Lys Ala Val Glu Ala Ala Gln Val Ala Phe Gln Arg Gly Ser Pro Trp Arg Arg 105 Leu Asp Ala Leu Ser Arg Gly Arg Leu Leu His Gln Leu Ala Asp Leu Val Glu Arg Asp Arg Ala Thr Leu Ala Ala Leu Glu Thr Met Asp Thr Gly Lys Pro Phe Leu His Ala Phe Phe Ile Asp Leu Glu Gly Cys Ile Arg Thr Leu Arg Tyr Phe Ala Gly Trp Ala Asp Lys Ile Gln Gly Lys

Thr Ile Pro Thr Asp Asp Asn Val Cys Ala Ser Pro Gly Met Ser Pro 180 185 190

Leu Val Ser Val Gly Pro Ser Leu His Gly Thr Ser Pro Cys 195 200 205

<210> 1311

<211> 142

<212> PRT

<213> Homo sapiens

<400> 1311

Ser Trp Glu Thr Glu Lys Met Gln Thr Ala Gly Ala Leu Phe Ile Ser 1 5 10 15

Pro Ala Leu Ile Arg Cys Cys Thr Arg Gly Leu Ile Arg Pro Val Ser

Ala Ser Phe Leu Asn Ser Pro Val Asn Ser Ser Lys Gln Pro Ser Tyr 35 40 45

Ser Asn Phe Pro Leu Gln Val Ala Arg Arg Glu Phe Gln Thr Ser Val 50 60

Val Ser Arg Asp Ile Asp Thr Ala Ala Lys Phe Ile Gly Ala Gly Ala 65 70 75 80

Ala Thr Val Gly Val Ala Gly Ser Gly Ala Gly Ile Gly Thr Val Phe $85 \hspace{1.5cm} 90 \hspace{1.5cm} 95$

Gly Ser Leu Ile Ile Gly Tyr Ala Arg Asn Pro Ser Leu Lys Gln Gln 100 105 110

Leu Phe Ser Tyr Ala Ile Leu Gly Phe Ala Leu Ser Glu Ala Met Gly
115 120 125

Leu Phe Cys Leu Met Val Ala Phe Leu Ile Leu Phe Ala Met 130 135 140

<210> 1312

<211> 495

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

WO 00/55350

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<22	:1> :	SITE													
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<22	0>														
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Arg		y Met	: Glu	Gly 5		Asp	Glu	val	Ser 10		. Arg	Glu	Gln	His	
His	Ser	: Glr	val 20		Glu	Ser	Thr	Ile 25		; Phe	. Leu	Leu	Phe		. Ile
Leu	Туг	Val	. Val	Ser	туг	Phe	Ile 40		Thr	Arg	Туг	Lys 45		Lys	Ser
Asp			Glu	Asp	Glu			Ile	Va1	. Asn		Ile	Ser	Leu	Phe
	50	,				55					60				
Leu 65		Thr	Phe	Thr	Leu 70		Val	Ser	Ala	Gly 75		Val	Leu	Leu	Leu 80
Pro	Phe	Ser	Ile	Ile 85	Ser	Asn	Glu	Ile	Leu 90		Ser	Phe	Pro	Gln 95	
Tyr	Tyr	Ile	Gln 100	Trp	Leu	Asn	Gly	Ser 105	Leu	Ile	His	Gly	Leu 110	Trp	Asn
Leu	Ala	Ser 115	Leu	Phe	Ser	Asn	Leu 120	Xaa	Leu	Phe	Val	Leu 125	Met	Pro	Phe
Ala	Phe 130		Phe	Leu	Glu	Ser 135	Glu	Gly	Phe	Ala	Gly 140	Leu	Lys	Lys	Gly
Tle	Ara	212	Ara	T16	T.o.	Glu	Wh r	T.ou	17 = 1	Mat	T.O.I	Tan	T.ou	Tan	712
145	9	****	Arg	113	150	GLU	1111	neu	val	155	Deu	neu	neu	Leu	160
Leu	Leu	Ile	Leu	Gly 165	Ile	Val	Trp	Val	Ala 170	Ser	Ala	Leu	Ile	Asp 175	Asn
Asp	Ala	Ala	Ser 180	Met	Glu	Ser	Leu	Туг 185	Asp	Leu	Trp	Glu	Phe 190	Туг	Leu
Pro	Tyr	Leu	Tyr	Ser	Суз	Ile	Ser	Leu	Met	Gly	Cys	Leu	Leu	Leu	Leu

		195	5				200)				205	;		
Leu	Cys 210		: Pro	Val	. Gly	215		· Arg	Met	: Phe	220		. Met	Gly	Gln
Leu 225		ı Val	. Lys	Pro	230		e Leu	Glu	Asp	235	_	Glu	Gln	Ile	Tyr 240
Ile	: Ile	. Thr	Leu	Glu 245		Glu	Ala	Leu	Gln 250		Arg	Leu	Asn	Gly 255	Leu
Ser	Ser	Ser	Val 260		Tyr	Asn	Ile	Met 265		Leu	Glu	Gln	Glu 270		Glu
Asn	Val	Lys 275		Leu	Lys	Thr	Lys 280		Asp	Pro	Trp	Ser 285		Phe	Ser
Val	Leu 290		Ser	Pro	Val	Тrр 295		Phe	Ala	Ala	Gln 300	Thr	Pro	Ala	Asp
Ile 305	Val	Ser	Pro	Asp	Ser 310		Phe	Met	Leu	Ser 315	Thr	Gln	Gly	Met	ser 320
Trp	Ala	Gln	Leu	Val 325		Leu	Leu	Pro	Ala 330		Arg	Pro	Gly	Asn 335	Ser
Gln	Asp	Lys	Arg 340	Arg	Lys	Lys	Ala	Ser 345	Ala	Trp	Glu	Arg	Asn 350	Leu	Val
Tyr	Pro	Ala 355	Val	Met	Val	Leu	Leu 360	Leu	Ile	Glu	Thr	Ser 365	Ile	Ser	Val
Leu	Leu 370	Val	Ala	Cys	Asn	Ile 375	Leu	Суз	Leu	Leu	Val 380	Asp	Glu	Thr	Ala
Met 385	Pro	Lys	Gly	Thr	Arg 390	Gly	Xaa	Gly	Ile	Gly 395	Asn	Ala	Ser	Leu	Ser 400
Phr	Phe	Gly	Phe	Val 405	Gly	Ala	Ala	Leu	Glu 410	Ile	Ile	Leu	Ile	Phe 415	Tyr
Seu	Met	Val	Ser 420	Ser	Val	Val	Gly	Phe 425	туг	Ser	Leu	Arg	Phe 430	Phe	Gly
Asn	Phe	Thr 435	Pro	Lys	Lys	Asp	Asp 440	Thr	Thr	Met	Thr	Lys 445	Ile	Ile	Gly
sn	Cys 450	Val	Ser	Ile	Leu	Val 455	Leu	Ser	Ser	Ala	Xaa 460	Pro	Val	Met	Ser
rg	Thr	Leu	Gly	Leu	His	Lys	Leu	His	Leu	Pro	Asn	Thr	Ser	Arg	Asp

1352

470 465 475 480 Ser Glu Thr Ala Lys Pro Ser Val Asn Gly His Gln Lys Ala Leu 485 490 <210> 1313 <211> 790 <212> PRT <213> Homo sapiens <400> 1313 Gly Thr Arg Gly Thr Ala Thr Glu Arg Leu Lys Met Ile Pro Phe Leu 10 Pro Met Phe Ser Leu Leu Leu Leu Ile Val Asn Pro Ile Asn Ala 25 Asn Asn His Tyr Asp Lys Ile Leu Ala His Ser Arg Ile Arg Gly Arg 40 Asp Gln Gly Pro Asn Val Cys Ala Leu Gln Gln Ile Leu Gly Thr Lys Lys Lys Tyr Phe Ser Thr Cys Lys Asn Trp Tyr Lys Lys Ser Ile Cys Gly Gln Lys Thr Thr Val Leu Tyr Glu Cys Cys Pro Gly Tyr Met Arg Met Glu Gly Met Lys Gly Cys Pro Ala Val Leu Pro Ile Asp His Val 105 Tyr Gly Thr Leu Gly Ile Val Gly Ala Thr Thr Thr Gln Arg Tyr Ser Asp Ala Ser Lys Leu Arg Glu Glu Ile Glu Gly Lys Gly Ser Phe Thr 135 Tyr Phe Ala Pro Ser Asn Glu Ala Trp Asp Asn Leu Asp Ser Asp Ile 145 Arg Arg Gly Leu Glu Ser Asn Val Asn Val Glu Leu Leu Asn Ala Leu 165 170 His Ser His Met Ile Asn Lys Arg Met Leu Thr Lys Asp Leu Lys Asn 185 180 Gly Met Ile Ile Pro Ser Met Tyr Asn Asn Leu Gly Leu Phe Ile Asn

200

HIS	210) ASD	GLY	val	215		val	. Asn	cys	220		ILe	ITe	HIS
Gly 225		Glm	ılle	: Ala	Thr 230		Gly	Val	. Val	His 235		Ile	Asp	Arg	Val 240
Leu	Thr	Gln	ılle	Gly 245		Ser	Ile	Gln	Asp 250		Ile	Glu	Ala	Glu 255	Asp
Asp	Leu	Ser	Ser 260		Arg	Ala	Ala	Ala 265		Thr	Ser	Asp	11e 270	Leu	Glu
Ala	Leu	Gly 275		Asp	Gly	Hìs	Phe 280		Leu	Phe	Ala	Pro 285		Asn	Glu
Ala	Phe 290		Lys	Lev	Pro	Arg 295	-	Val	Leu	Glu	Arg 300	Ile	Met	Gly	Asp
Lys 305		Ala	Ser	Glu	Ala 310	Leu	Met	Lys	Туr	His 315		Leu	Asn	Thr	Leu 320
Gln	Cys	Ser	Glu	Ser 325		Met	Gly	Gly	Ala 330	Val	Phe	Glu	Thr	Leu 335	Glu
Gly	Asn	Thr	Ile 340		Ile	Gly	Суз	Asp 345	Gly	Asp	Ser	Ile	Thr 350	Val	Asn
Gly	Ile	Lys 355	Met	Val	Asn	Lys	Lys 360	Asp	Ile	Val	Thr	Asn 365	Asn	Gly	Val
Ile	His 370	Leu	Ile	Asp	Gln	Val 375	Leu	Ile	Pro	Asp	Ser 380	Ala	Lys	Gln	Val
Ile 385	Glu	Leu	Ala	Gly	Lys 390	Gln	Gln	Thr	Thr	Phe 395	Thr	Asp	Leu	Val	Ala 400
Gln	Leu	Gly	Leu	Ala 405	Ser	Ala	Leu	Arg	Pro 410	Asp	Gly	Glu	Tyr	Thr 415	Leu
Leu	Ala	Pro	Val 420	Asn	Asn	Ala	Phe	Ser 425	Asp	Asp	Thr	Leu	Ser 430	Met	Asp
Gln	Arg	Leu 435	Leu	Lys	Leu	Ile	Leu 440	Gln	Asn	His	Ile	Leu 445	Lys	Val	Lys
	450				Leu	455		-			460				-
Gly 465	Lys	Gln	Leu	Arg	Val 470	Phe	Val	Tyr	Arg	Thr 475	Ala	Val	Cys	Ile	Glu 480

AE	ii sei	. Cys	net	485		. сту	261	гуз	490		ALG	ASI.	. Gry	495	
Hi	s Ile	Phe	Arg 500		Ile	Ile	Lys	Pro 505		Glu	Lys	Ser	Leu 510		Gl
Ly	's Leu	Lys 515		Asp	Lys	Arg	Phe 520		Thr	Phe	Leu	Ser 525		Leu	Glı
Al	a Ala 530	_	Leu	Lys	Glu	Leu 535		Thr	Gln	Pro	Gly 540	_	Trp	Thr	Let
Ph 54	e Val	. Pro	Thr	Asn	Asp 550		Phe	Lys	Gly	Met 555		Ser	Glu	Glu	Lys 560
Gl	u Ile	. Leu	Ile	Arg 565	-	Lys	Asn	Ala	Leu 570		Asn	Ile	Ile	Leu 575	_
Hi	s Leu	Thr	Pro 580	_	Val	Phe	Ile	Gly 585	_	Gly	Phe	Glu	Pro 590	_	Va:
Th	r Asn	1le 595		Lys	Thr	Thr	Gln 600	Gly	Ser	Lys	Ile	Phe 605		Lys	Glı
Va	1 Asn 610	_	Thr	Leu	Leu	Val 615		Glu	Leu	Lys	Ser 620	_	Glu	Ser	Asp
I1 62	e Met 5	Thr	Thr	Asn	Gly 630	Val	Ile	His	Val	Val 635	Asp	Lys	Leu	Leu	Ty:
Pr	o Ala	Asp	Thr	Pro 645	Val	Gly	Asn	Asp	Gln 650		Leu	Glu	Ile	Leu 655	Asr
Lу	s Leu	Ile	Lys 660	Tyr	Ile	Gln	Ile	Lys 665	Phe	Val	Arg	Gly	Ser 670	Thr	Phe
Ly	s Glu	Ile 675	Pro	Val	Thr	Val	Tyr 680	Lys	Pro	Ile	Ile	Lys 685	Lys	Tyr	Thr
Ly	690		Asp	Gly	Val	Pro 695	Val	Glu	Ile	Thr	Glu 700	Lys	Glu	Thr	Arg
G1:	ı Glu 5	Arg	Ile	Ile	Thr 710	Gly	Pro	Glu	Ile	Lys 715	Tyr	Thr	Arg	Ile	Ser 720
Th	r Gly	Gly	Gly	Glu 725	Thr	Glu	Glu	Thr	Leu 730	Lys	Lys	Leu	Leu	Gln 735	Glu
Glı	ı Val	Thr	Lys 740	Val	Thr	Lys	Phe	Ile 745	Glu	Gly	Gly	Asp	Gly 750	His	Leu

1355

Phe Glu Asp Glu Glu Ile Lys Arg Leu Leu Gln Gly Asp Thr Pro Val 755 760 765

Arg Lys Leu Gln Ala Asn Lys Lys Val Gln Gly Ser Arg Arg Leu 770 775 780

Arg Glu Gly Arg Ser Gln 785 790

<210> 1314

<211> 73

<212> PRT

<213> Homo sapiens

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<220>

<221> SITE

<222> (20)

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<400> 1314

Thr Ser Trp Ala Phe Asp Glu Thr Gly Xaa Asn Thr Ala Val Phe Leu 1 5 10 15

Leu Glu Ile Xaa Trp Gly Ile Phe Phe Glu Leu Met Gly Thr Ile Arg 20 25 30

His Asn Cys Leu His Lys Leu Gly Ile Xaa Asp Phe Gly Ile Thr Ile 35 40 45

Tyr Gln Asn Gly Asp Ile Ser Pro Leu Val Leu Arg Cys Lys Pro Lys 50 55 60

Asn Ile Met Thr Ser Phe Gln Ala Ser 65 70

<210> 1315

<211> 268 <212> PRT <213> Homo sapiens <400> 1315 Pro Gly Arg Pro Thr Arg Pro Arg Thr Arg Gly Ile Asn Lys Leu Ile Arg Ile Gly Arg Asn Glu Cys Val Val Val Ile Arg Val Asp Lys Glu 25 Lys Gly Tyr Ile Asp Leu Ser Lys Arg Arg Val Ser Pro Glu Glu Ala 40 Ile Lys Cys Glu Asp Lys Phe Thr Lys Ser Lys Thr Val Tyr Ser Ile Leu Arg His Val Ala Glu Val Leu Glu Tyr Thr Lys Asp Glu Gln Leu Glu Ser Leu Phe Gln Arg Thr Ala Trp Val Phe Asp Asp Lys Tyr Lys 90 Arg Pro Gly Tyr Gly Ala Tyr Asp Ala Phe Lys His Ala Val Ser Asp 105 Pro Ser Ile Leu Asp Ser Leu Asp Leu Asn Glu Asp Glu Arg Glu Val 120 Leu Ile Asn Asn Ile Asn Arg Arg Leu Thr Pro Gln Ala Val Lys Ile 135 140 Arg Ala Asp Ile Glu Val Ala Cys Tyr Gly Tyr Glu Gly Ile Asp Ala 150 Val Lys Glu Ala Leu Arg Ala Gly Leu Asn Cys Ser Thr Glu Asn Met Pro Ile Lys Ile Asn Leu Ile Ala Pro Pro Arg Tyr Val Met Thr Thr Thr Thr Leu Glu Arg Thr Glu Gly Leu Ser Val Leu Ser Gln Ala Met 200 Ala Val Ile Lys Glu Lys Ile Glu Glu Lys Arg Gly Val Phe Asn Val Gln Met Glu Pro Lys Val Val Thr Asp Thr Asp Glu Thr Glu Leu Ala 230

Arg Gln Met Glu Arg Leu Glu Arg Glu Asn Ala Glu Val Asp Gly Asp

1357

245 250 255

Asp Asp Ala Glu Glu Met Glu Ala Lys Ala Glu Asp 260 265

<210> 1316

<211> 315

<212> PRT

<213> Homo sapiens

<400> 1316

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Ala Ala Asp Ser Ala Glu Pro Ala Leu Pro Ala Gly Glu Pro Gly Gly 20 25 30

Pro Thr Leu Met Arg Leu Asn Ser Val Gln Ser Ser Glu Arg Pro Leu 35 40 45

Phe Leu Val His Pro Ile Glu Gly Ser Thr Thr Val Phe His Ser Leu 50 60

Ala Ser Arg Leu Ser Ile Pro Thr Tyr Gly Leu Gln Cys Thr Arg Ala 65 70 75 80

Ala Pro Leu Asp Ser Ile His Ser Leu Ala Ala Tyr Tyr Ile Asp Cys 85 90 95

Ile Arg Gln Val Gln Pro Glu Gly Pro Tyr Arg Val Ala Gly Tyr Ser 100 105 110

Tyr Gly Ala Cys Val Ala Phe Glu Met Cys Ser Gln Leu Gln Ala Gln 115 120 125

Gln Ser Pro Ala Pro Thr His Asn Ser Leu Phe Leu Phe Asp Gly Ser 130 135 140

Pro Thr Tyr Val Leu Ala Tyr Thr Gln Ser Tyr Arg Ala Lys Leu Thr 145 150 155 160

Pro Gly Cys Glu Ala Glu Ala Glu Thr Glu Ala Ile Cys Phe Phe Val 165 170 175

Gln Gln Phe Thr Asp Met Glu His Asn Arg Val Leu Glu Ala Leu Leu 180 185 190

Pro Leu Lys Gly Leu Glu Glu Arg Val Ala Ala Ala Val Asp Leu Ile 195 200 205

1358

Ile Lys Ser His Gln Gly Leu Asp Arg Gln Glu Leu Ser Phe Ala Ala 215 Arg Ser Phe Tyr Tyr Lys Leu Arg Ala Ala Glu Gln Tyr Thr Pro Lys 225 230 235 Ala Lys Tyr His Gly Asn Val Met Leu Leu Arg Ala Lys Thr Gly Gly Ala Tyr Gly Glu Asp Leu Gly Ala Asp Tyr Asn Leu Ser Gln Val Cys 265 Asp Gly Lys Val Ser Val His Val Ile Glu Gly Asp His Arg Thr Leu 280 Leu Glu Gly Ser Gly Leu Glu Ser Ile Ile Ser Ile Ile His Ser Ser 295 300 Leu Ala Glu Pro Arg Val Ser Val Arg Glu Gly 310 <210> 1317 <211> 191 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (3) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (5) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (10) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (20) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE

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PCT/US00/05882

1359

<222> (25) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (186) <223> Xaa equals any of the naturally occurring L-amino acids Thr Thr Xaa Val Xaa Asp Arg Leu Leu Xaa Thr Ser Gly Ser Pro Gly Thr Asp Arg Xaa Phe Gly His Glu Xaa Glu Met Ala Pro Asn Ala Ser 25 Cys Leu Cys Val His Val Arg Ser Glu Glu Trp Asp Leu Met Thr Phe Asp Ala Asn Pro Tyr Asp Ser Val Lys Lys Ile Lys Glu His Val Arg 55 Ser Lys Thr Lys Val Pro Val Gln Asp Gln Val Leu Leu Gly Ser 70 75 Lys Ile Leu Lys Pro Arg Arg Ser Leu Ser Ser Tyr Gly Ile Asp Lys 85 Glu Lys Thr Ile His Leu Thr Leu Lys Val Val Lys Pro Ser Asp Glu Glu Leu Pro Leu Phe Leu Val Glu Ser Gly Asp Glu Ala Lys Arg His 115 120 Leu Leu Gln Val Arg Arg Ser Ser Ser Val Ala Gln Val Lys Ala Met 135 Ile Glu Thr Lys Thr Gly Ile Ile Pro Glu Thr Gln Ile Val Thr Cys 150 Asn Gly Lys Arg Leu Glu Asp Gly Lys Met Met Ala Asp Tyr Gly Ile 170 Arg Lys Gly Asn Leu Leu Phe Leu Ala Xaa Tyr Cys Ile Gly Gly

185

<210> 1318 <211> 230 <212> PRT

<213> Homo sapiens

<400> 1318															
Arg 1	Asn	Leu	Gln	Glu 5	Thr	Ala	Ile	Met		Glu	-	Pro	Lys	Leu 15	His
Tyr	Phe	Asn	Ala 20	Arg	Gly	Arg	Met	Glu 25	ser	Thr	Arg	Trp	Leu 30	Leu	Ala
Ala	Ala	Gly 35	Val	Glu	Phe	Glu	Glu 40	Lys	Phe	Ile	Lys	Ser 45	Ala	Glu	Asp
Leu	Asp 50	Lys	Leu	Arg	Asn	Asp 55	Gly	Tyr	Leu	Met	Phe 60	Gln	Gln	Val	Pro
Met 65	Val	Glu	Ile	Asp	Gly 70	Met	Lys	Leu	Val	Gln 75	Thr	Arg	Ala	Ile	Leu 80

Asn Tyr Ile Ala Ser Lys Tyr Asn Leu Tyr Gly Lys Asp Ile Lys Glu

85 90 95
Arg Ala Leu Ile Asp Met Tyr Ile Glu Gly Ile Ala Asp Leu Gly Glu

100 . 105 . 110 Met Ile Leu Leu Pro Val Cys Pro Pro Glu Glu Lys Asp Ala Lys

Leu Ala Leu Ile Lys Glu Lys Ile Lys Asn Arg Tyr Phe Pro Ala Phe 130 135 140

120

Leu Ser Arg Ala Asp Ile His Leu Val Glu Leu Leu Tyr Tyr Val Glu 165 170 175

Glu Leu Asp Ser Ser Leu Ile Ser Ser Phe Pro Leu Leu Lys Ala Leu 180 185 190

Lys Thr Arg Ile Ser Asn Leu Pro Thr Val Lys Lys Phe Leu Gln Pro 195 200 205

Gly Ser Pro Arg Lys Pro Pro Met Asp Glu Lys Ser Leu Glu Glu Ala 210 215 220

Arg Lys Ile Phe Arg Phe 225 230

<210> 1319. <211> 279

<212> PRT

<213> Homo sapiens

<400> 1319

Glu Gly Pro Ala Glu Gly Asn Met Ala Ala Lys Val Phe Glu Ser Ile 1 5 10 15

Gly Lys Phe Gly Leu Ala Leu Ala Val Ala Gly Gly Val Val As
n Ser 20 25 30

Ala Leu Tyr Asn Val Asp Ala Gly His Arg Ala Val Ile Phe Asp Arg 35 40 45

Phe Arg Gly Val Gln Asp Ile Val Val Gly Glu Gly Thr His Phe Leu 50 60

Ile Pro Trp Val Gln Lys Pro Ile Ile Phe Asp Cys Arg Ser Arg Pro 65 70 75 80

Arg Asn Val Pro Val Ile Thr Gly Ser Lys Asp Leu Gln Asn Val Asn 85 90 95

Ile Thr Leu Arg Ile Leu Phe Arg Pro Val Ala Ser Gln Leu Pro Arg 100 105 110

Ile Phe Thr Ser Ile Gly Glu Asp Tyr Asp Glu Arg Val Leu Pro Ser

Ile Thr Thr Glu Ile Leu Lys Ser Val Val Ala Arg Phe Asp Ala Gly
130 135 140

Glu Leu Ile Thr Gln Arg Glu Leu Val Ser Arg Gln Val Ser Asp Asp 145 150 155 160

Leu Thr Glu Arg Ala Ala Thr Phe Gly Leu Ile Leu Asp Asp Val Ser

Leu Thr His Leu Thr Phe Gly Lys Glu Phe Thr Glu Ala Val Glu Ala 180 185 190

Lys Gln Val Ala Gln Gln Glu Ala Glu Arg Ala Arg Phe Val Val Glu
195 200 205

Lys Ala Glu Gln Gln Lys Lys Ala Ala Ile Ile Ser Ala Glu Gly Asp 210 215 220

Ser Lys Ala Ala Glu Leu Ile Ala Asn Ser Leu Ala Thr Ala Gly Asp 225 230 235 240

Gly Leu Ile Glu Leu Arg Lys Leu Glu Ala Ala Glu Asp Ile Ala Tyr 245 250 255

Gln Leu Ser Arg Ser Arg Asn Ile Thr Tyr Leu Pro Ala Gly Gln Ser 260 265 270

Val Leu Leu Gln Leu Pro Gln 275

<210> 1320

<211> 406

<212> PRT

<213> Homo sapiens

<400> 1320

Val Thr Ala Cys Ala Ala Pro Ala Ala Trp Leu Pro Ile Leu Val Ala 1 5 10 15

Asp Ile Trp Ser Ser Tyr Asn Met Ala Asp Ile Asp Asn Lys Glu Gln 20 25 30

Ser Glu Leu Asp Gln Asp Leu Asp Asp Val Glu Glu Val Glu Glu Glu 35 40 45

Glu Thr Gly Glu Glu Thr Lys Leu Lys Ala Arg Gln Leu Thr Val Gln 50 60

Met Met Gln Asn Pro Gln Ile Leu Ala Ala Leu Gln Glu Arg Leu Asp 65 70 75 80

Gly Leu Val Glu Thr Pro Thr Gly Tyr Ile Glu Ser Leu Pro Arg Val 85 90 95

Val Lys Arg Val Asn Ala Leu Lys Asn Leu Gln Val Lys Cys Ala 100 105 110

Gln Ile Glu Ala Lys Phe Tyr Glu Glu Val His Asp Leu Glu Arg Lys 115 120 125

Tyr Ala Val Leu Tyr Gln Pro Leu Phe Asp Lys Arg Phe Glu Ile Ile 130 135 140

Asn Ala Ile Tyr Glu Pro Thr Glu Glu Glu Cys Glu Trp Lys Pro Asp 145 150 155 160

Glu Glu Asp Glu Ile Ser Glu Glu Leu Lys Glu Lys Ala Lys Ile Glu
165 170 175

Asp Glu Lys Lys Asp Glu Glu Lys Glu Asp Pro Lys Gly Ile Pro Glu 180 185 190

Phe Trp Leu Thr Val Phe Lys Asn Val Asp Leu Leu Ser Asp Met Val 200 Gln Glu His Asp Glu Pro Ile Leu Lys His Leu Lys Asp Ile Lys Val 215 Lys Phe Ser Asp Ala Gly Gln Pro Met Ser Phe Val Leu Glu Phe His Phe Glu Pro Asn Glu Tyr Phe Thr Asn Glu Val Leu Thr Lys Thr Tyr 245 250 Arg Met Arg Ser Glu Pro Asp Asp Ser Asp Pro Phe Ser Phe Asp Gly 260 265 Pro Glu Ile Met Gly Cys Thr Gly Cys Gln Ile Asp Trp Lys Lys Gly 280 Lys Asn Val Thr Leu Lys Thr Ile Lys Lys Gln Lys His Lys Gly Arg Gly Thr Val Arg Thr Val Thr Lys Thr Val Ser Asn Asp Ser Phe 310 315 Phe Asn Phe Phe Ala Pro Pro Glu Val Pro Glu Ser Gly Asp Leu Asp Asp Asp Ala Glu Ala Ile Leu Ala Ala Asp Phe Glu Ile Gly His Phe 345 Leu Arg Glu Arg Ile Ile Pro Arg Ser Val Leu Tyr Phe Thr Gly Glu Ala Ile Glu Asp Asp Asp Asp Tyr Asp Glu Glu Glu Glu Ala 375 Asp Glu Gly Tyr Gln Leu Phe Glu Glu Val Lys Ser Cys Ser Lys Leu 395 Phe Gln Arg Trp Leu Gln

<210> 1321

<211> 173

<212> PRT

<213> Homo sapiens

405

<220>

<221> SITE

PCT/US00/05882

<222> (55) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1321 Gln Ser Ala Cys Ser Leu Leu Pro Glu Met Pro Arg Ile Leu Thr Arg 5 Thr Pro Ser Ser Arg Met Ile Val Leu Arg Leu Met Pro Val Gly Gly 25 Arg Arg Pro Ile Val Thr Ser Phe Gly Gly Cys Ser Thr Ala Pro Arg Ala Asn Phe Pro Leu Pro Xaa Pro Ala Leu Arg Gln Ser Arg Ser Lys Met Ala Val Val Gly Val Ser Ser Val Ser Arg Leu Leu Gly Arg Ser 70 Arg Pro Gln Leu Gly Arg Pro Met Ser Ser Gly Ala His Gly Glu Glu 85 90 Gly Ser Ala Arg Met Trp Lys Thr Leu Thr Phe Phe Val Ala Leu Pro

Gly Val Ala Val Ser Met Leu Asn Val Tyr Leu Lys Ser His His Gly

Glu His Glu Arg Pro Glu Phe Ile Ala Tyr Pro His Leu Arg Ile Arg

Thr Lys Pro Phe Pro Trp Gly Asp Gly Asn His Thr Leu Phe His Asn

Pro His Val Asn Pro Leu Pro Thr Gly Tyr Glu Asp Glu 165

<210> 1322

<211> 209

<212> PRT

<213> Homo sapiens

Lys Thr Gln Ala Ala Ser Val Glu Ala Val Lys Met Leu Asp Glu Ile

Leu Leu Gln Leu Ser Ala Ser Val Pro Val Asp Val Met Pro Gly Glu 20 25

Phe Asp Pro Thr Asn Tyr Thr Leu Pro Gln Gln Pro Leu His Pro Cys $35 \hspace{1cm} 40 \hspace{1cm} 45$

Met Phe Pro Leu Ala Thr Ala Tyr Ser Thr Leu Gln Leu Val Thr Asn 50 60

Pro Tyr Gln Ala Thr Ile Asp Gly Val Arg Phe Leu Gly Thr Ser Gly 65 70 75 80

Gln Asn Val Ser Asp Ile Phe Arg Tyr Ser Ser Met Glu Asp His Leu 85 90 95

Glu Ile Leu Glu Trp Thr Leu Arg Val Arg His Ile Ser Pro Thr Ala $100 \hspace{1.5cm} 105 \hspace{1.5cm} 105 \hspace{1.5cm} 110 \hspace{1.5cm}$

Pro Asp Thr Leu Gly Cys Tyr Pro Phe Tyr Lys Thr Asp Pro Phe Ile 115 120 125

Phe Pro Glu Cys Pro His Val Tyr Phe Cys Gly Asn Thr Pro Ser Phe 130 135 140

Gly Ser Lys Ile Ile Arg Gly Pro Glu Asp Gln Thr Val Leu Leu Val 145 150 155 160

Thr Val Pro Asp Phe Ser Ala Thr Gln Thr Ala Cys Leu Val Asn Leu 165 170 175

Arg Ser Leu Ala Cys Gln Pro Ile Ser Phe Ser Gly Phe Gly Ala Glu 180 185 190

Asp Asp Asp Leu Gly Gly Leu Gly Trp Ala Pro Asp Ser Lys Lys Trp
195 200 205

Phe

<210> 1323

<211> 291

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (30)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (57)

PCT/US00/05882

<223> Xaa equals any of the naturally occurring L-amino	acids
<400> 1323 Asn Asn Val Ala Thr Thr His Glu Pro Ala Ser Val Pro Ala 1 5 10	Pro Gln 15
Gly Asp Leu Leu Ser Gly Ala Glu Pro Glu Gly Gly Asn Xaa 20 25 30	Ala Arg
Arg Pro Pro Gly Ala Arg Glu Gln Pro Gln Ser Pro Pro Pro 35 40 45	Ala Arg
Gly Gly Ala Gly Ser Leu Ala Thr Xaa Ala Pro Pro Ser Ser 50 55 60	Gly Leu
Ser Cys Pro Gly Cys Phe Arg Leu Arg Leu Trp Met Leu Arg 65 70 75	Leu Ser 80
Glu Arg Asn Met Lys Val Leu Leu Ala Ala Ala Leu Ile Ala 85 90	Gly Ser 95
Val Phe Phe Leu Leu Leu Pro Gly Pro Ser Ala Ala Asp Glu 100 105 110	Lys Lys
Lys Gly Pro Lys Val Thr Val Lys Val Tyr Phe Asp Leu Arg 115 120 125	Ile Gly
Asp Glu Asp Val Gly Arg Val Ile Phe Gly Leu Phe Gly Lys 130 135 140	Thr Val
Pro Lys Thr Val Asp Asn Phe Val Ala Leu Ala Thr Gly Glu 145 150 155	Lys Gly 160
Phe Gly Tyr Lys Asn Ser Lys Phe His Arg Val Ile Lys Asp 165 170	Phe Met 175
Ile Gln Gly Gly Asp Phe Thr Arg Gly Asp Gly Thr Gly Gly 180 185 190	Lys Ser
Ile Tyr Gly Glu Arg Phe Pro Asp Glu Asn Phe Lys Leu Lys195200205	His Tyr
Gly Pro Gly Trp Val Ser Met Ala Asn Ala Gly Lys Asp Thr 210 215 220	Asn Gly
Ser Gln Phe Phe Ile Thr Thr Val Lys Thr Ala Trp Leu Asp 225 230 235	Gly Lys 240
His Val Val Phe Gly Lys Val Leu Glu Gly Met Glu Val Val . 245 250	Arg Lys 255

1367

Val Glu Ser Thr Lys Thr Asp Ser Arg Asp Lys Pro Leu Lys Asp Val 260 265 270

Ile Ile Ala Asp Cys Gly Lys Ile Glu Val Glu Lys Pro Phe Ala Ile 275 280 285

Ala Lys Glu 290

<210> 1324

<211> 150

<212> PRT

<213> Homo sapiens

<400> 1324

Glu Cys Leu Val Arg Ser Lys Asn Ile Thr Gln Ile Val Gly His Ser

Gly Cys Glu Ala Lys Ser Ile Gln Asn Arg Ala Cys Leu Gly Gln Cys
20 25 30

Phe Ser Tyr Ser Val Pro Asn Thr Phe Pro Gln Ser Thr Glu Ser Leu 35 40 45

Val His Cys Asp Ser Cys Met Pro Ala Gln Ser Met Trp Glu Ile Val 50 55 60

Thr Leu Glu Cys Pro Gly His Glu Glu Val Pro Arg Val Asp Lys Leu 65 70 75 80

Val Glu Lys Ile Leu His Cys Ser Cys Gln Ala Cys Gly Lys Glu Pro 85 90 95

Ser His Glu Gly Leu Ser Val Tyr Val Gln Gly Glu Asp Gly Pro Gly 100 105 110

Ser Gln Pro Gly Thr His Pro His Pro His Pro His Pro Gly
115 120 125

Gly Gln Thr Pro Glu Pro Glu Asp Pro Pro Gly Ala Pro His Thr Glu 130 135 140

Glu Glu Gly Ala Glu Asp 145 150

<210> 1325

<211> 56

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<212> PRT
<213> Homo sapiens
Glu Ile Asn Ile Ser Arg Lys Gly Glu Ser Arg Phe Tyr Lys Met Ser
                                     10
Gln Leu Ser Asn Ile Trp Gly Ser Asp Ser Phe Phe Val Arg Thr Phe
                                 25
Glu Thr Ser Lys Gln Pro Leu Phe Leu Lys Asn Ser Gly Phe Thr Leu
         35
                             40
                                                 45
Thr His Val Ser Phe Thr Pro Phe
     50
<210> 1326
<211> 486
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (438)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (447)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1326
Arg Leu Pro Leu Gly Ser Arg Ser Pro Ser Glu Ala Ala Gly Ala Glu
Thr Ala Pro Ser Ser Leu Ser Ala Ala Met Thr Pro Leu Val Ser Arg
Leu Xaa Arg Leu Trp Ala Ile Met Arg Lys Pro Arg Ala Ala Val Gly
         35
                            40
Ser Gly His Arg Lys Gln Ala Ala Ser Gln Glu Gly Arg Gln Lys His
```

55

65		ASI	i MSI	ı ser	70		, nys	PIC	, ser	. A16		, wat	, Gly	, rec	80
Arg	Gln	Pro	Glu	61 G1 G	Val	Val	. Leu	. Gln	Ala 90		Val	. Ser	Ser	Tyr 95	
Leu	Phe	Arg	Asp 100		. Ala	Glu	ı Val	Thr 105		Phe	Arg	Gly	Ser 110		Leu
Ser	Trp	115		Gln	Glu	Lys	120	_	Leu	Pro	Trp	125	-	Arg	Ala
Glu	Asp 130		Met	. Asp	Leu	Asp 135		Arg	Ala	Туг	140		Trp	Val	Ser
Glu 145		Met	Leu	Gln	Gln 150		Gln	Val	Ala	Thr 155		Ile	Asn	Tyr	Tyr 160
Thr	Gly	Trp	Met	Gln 165	Lys	Trp	Pro	Thr	Leu 170		Asp	Leu	Ala	Ser 175	
Ser	Leu	Glu	Glu 180		Asn	Gln	Leu	Trp 185		Gly	Leu	Gly	Туг 190	-	Ser
Arg	Gly	Arg 195		Leu	Gln	Glu	Gly 200		Arg	Lys	Val	Val 205		Glu	Leu
Gly	Gly 210	His	Met	Pro	Arg	Thr 215	Ala	Glu	Thr	Leu	Gln 220	Gln	Leu	Leu	Pro
225					Thr 230					235					240
Gln	Ala	Thr	Gly	Val 245	Val	Asp	Gly	Asn	Val 250	Ala	Arg	Val	Leu	Cys 255	Arg
			260		Ala			265					270		
Leu	Trp	Gly 275	Leu	Ala	Gln	Gln	Leu 280	Val	Asp	Pro	Ala	Arg 285	Pro	Gly	Asp
	290				Met	295		_			300	•			
305					Gln 310					315					320
Gln	Arg	Val	Glu	Gln 325	Glu	Gln	Leu	Leu	Ala 330	Ser	Gly	Ser	Leu	ser 335	Gly

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1370

Ser Pro Asp Val Glu Glu Cys Ala Pro Asn Thr Gly Gln Cys His Leu $340 \hspace{1cm} 345 \hspace{1cm} 350$

Cys Leu Pro Pro Ser Glu Pro Trp Asp Gln Thr Leu Gly Val Val Asn 355 360 365

Phe Pro Arg Lys Ala Ser Arg Lys Pro Pro Arg Glu Glu Ser Ser Ala 370 375 380

Thr Cys Val Leu Glu Gln Pro Gly Ala Leu Gly Ala Gln Ile Leu Leu 385 390 395 400

Val Gln Arg Pro Asn Ser Gly Leu Leu Ala Gly Leu Trp Glu Phe Pro 405 410 415

Ser Val Thr Trp Glu Pro Ser Glu Gln Leu Gln Arg Lys Ala Leu Leu 420 425 430

Gln Glu Leu Gln Arg Xaa Ala Gly Pro Leu Pro Ala Thr His Xaa Arg 435 440 445

His Leu Gly Glu Val Val His Thr Phe Ser His Ile Lys Leu Thr Tyr 450 455 460

Gln Val Tyr Gly Leu Ala Leu Glu Gly Gln Thr Pro Val Thr Thr Val 465 470 475 480

Pro Pro Gly Ala Arg Cys 485

<210> 1327

<211> 88

<212> PRT

<213> Homo sapiens

<400> 1327

Lys Thr Leu Phe Thr Tyr Ser Phe His Gly Tyr Asn Thr Leu Ala Asp 1 5 10 15

Phe Leu Leu Ala Leu Gly Ala Met Ile Leu Ile Thr Phe Cys Lys Val 20 25 30

Thr Asn Val Ile His Ser Thr Leu Cys Gly Ser His Leu Phe Arg Leu
35 40 45

Met Cys Phe Gly Glu Arg Lys Lys Phe Leu Ala Glu Tyr Tyr Phe Glu 50 55 60

Leu Ser Arg Thr Leu Ser His Gln Arg Gln Phe Phe Ser Val Gln Phe

1371

65 70 75 80

Pro Ile Pro Asp Asn Leu Leu Lys 85

<210> 1328

<211> 424

<212> PRT

<213> Homo sapiens

<400> 1328

Ile Arg Val Ser Phe Met Asn Asn Gln Lys Gln Gln Lys Pro Thr Leu 1 5 10 15

Ser Gly Gln Arg Phe Lys Thr Arg Lys Arg Asp Glu Lys Glu Arg Phe 20 25 30

Asp Pro Thr Gln Phe Gln Asp Cys Ile Ile Gln Gly Leu Thr Glu Thr 35 40 45

Gly Thr Asp Leu Glu Ala Val Ala Lys Phe Leu Asp Ala Ser Gly Ala 50 5560

Lys Leu Asp Tyr Arg Arg Tyr Ala Glu Thr Leu Phe Asp Ile Leu Val 65 70 75 80

Ala Gly Gly Met Leu Ala Pro Gly Gly Thr Leu Ala Asp Asp Met Met 85 90 95

Arg Thr Asp Val Cys Val Phe Ala Ala Gln Glu Asp Leu Glu Thr Met $100 \hspace{1cm} 105 \hspace{1cm} 110$

Gln Ala Phe Ala Gln Val Phe Asn Lys Leu Ile Arg Arg Tyr Lys Tyr 115 120 125

Leu Glu Lys Gly Phe Glu Asp Glu Val Lys Lys Leu Leu Leu Phe Leu 130 135 140

Lys Gly Phe Ser Glu Ser Glu Arg Asn Lys Leu Ala Met Leu Thr Gly 145 150 155 160

Val Leu Leu Ala Asn Gly Thr Leu Asn Ala Ser Ile Leu Asn Ser Leu 165 170 175

Tyr Asn Glu Asn Leu Val Lys Glu Gly Val Ser Ala Ala Phe Ala Val 180 185 190

Lys Leu Phe Lys Ser Trp Ile Asn Glu Lys Asp Ile Asn Ala Val Ala 195 200 205

	210					215					220				
Pro 225	Ala	Asn	Lys	Gln	Ser 230	Val	Glu	His	Phe	Thr 235	Lys	Туг	Phe	Thr	Glu 240
Ala	Gly	Leu	Lys	Glu 245	Leu	Ser	Glu	Tyr	Val 250	Arg	Asn	Gln	Gln	Thr 255	Ile
Gly	Ala	Arg	Lys 260	Glu	Leu	Gln	Lys	Glu 265	Leu	Gln	Glu	Gln	Met 270	Ser	Arg
Gly	Asp	Pro 275	Phe	Lys	Asp	Ile	11e 280	Leu	Tyr	Val	ГÀЗ	Glu 285	Glu	Met	Lys
Lys	Asn 290	Asn	Ile	Pro	Glu	Pro 295	Val	Val	Ile	Gly	11e 300	Val	Trp	Ser	Ser
Val 305	Met	Ser	Thr	Val	Glu 310	Trp	Asn	Lys	Lys	Glu 315	Glu	Leu	Val	Ala	Glu 320
Gln	Ala	Ile	Lys	His 325	Leu	Lys	Gln	Tyr	Ser 330	Pro	Leu	Leu	Ala	Ala 335	Phe
Thr	Thr	Gln	Gly 340	Gln	Ser	Glu	Leu	Thr 345	Leu	Leu	Leu	Lys	Ile 350	Gln	Glu

Ala Ser Leu Arg Lys Val Ser Met Asp Asn Arg Leu Met Glu Leu Phe

Gln Met Lys Lys Phe Val Glu Trp Leu Lys Asn Ala Glu Glu Ser 405 410 415

Tyr Cys Tyr Asp Asn Ile His Phe Met Lys Ala Phe Gln Lys Ile Val 355 360 365

Val Leu Phe Tyr Lys Ala Glu Val Leu Ser Glu Glu Pro Ile Leu Lys

Trp Tyr Lys Asp Ala His Val Ala Lys Gly Lys Ser Val Phe Leu Glu

Glu Ser Glu Ala Glu Glu Gly Asp 420

370 375

<210> 1329

<211> 558

<212> PRT

<213> Homo sapiens

<400> 1329

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Trp 1		Cys	s Ser	Val		Leu	ı Ala	Ser	Thr 10		l Gly	Glu	d Gln	Ala 15	
Ala	Val	Ala	Ala 20		Phe	Ser	Leu	His 25		Asp	Tyr	Ala	Met 30		Gly
Phe	Val	Gly 35		Val	Ala	Ala	Ala 40		Ala	Ser	Gly	Ala 45		Arg	Arç
Leu	Thr 50		Ser	Ala	. Ser	Leu 55		Pro	Ala	. Gln	Leu 60		Leu	Arg	Ala
Ala 65		Thr	Ala	Val	His 70		Val	Arg	Asp	Tyr 75	Ala	Ala	Gln	Thr	Ser 80
Pro	Ser	Pro	Lys	Ala 85	-	Ala	Ala	Thr	Gly 90	_	Ile	Val	Ala	Val 95	
Gly	Ala	Val	Val 100	_	Val	Gln	Phe	Asp 105		Gly	Leu	Pro	Pro 110		Leu
Asn	Ala	Leu 115		Val	Gln	Gly	Arg 120	Glu	Thr	Arg	Leu	Val 125		Glu	Val
Ala	Gln 130	His	Leu	Gly	Glu	Ser 135		Val	Arg	Thr	11e 140	Ala	Met	Asp	Gly
Thr 145	Glu	Gly	Leu	Val	Arg 150	Gly	Gln	Lys	Val	Leu 155	Asp	Ser	Gly	Ala	Pro 160
Ile	Lys	Ile	Pro	Val 165	Gly	Pro	Glu	Thr	Leu 170	Gly	Arg	Ile	Met	Asn 175	Val
			180		_			185			Lys		190		
		195					200				Glu	205			
	210					215		_			Asp 220				
Tyr 225	Ala	Lys	Gly	Gly	Lys 230	Ile	Gly	Leu	Phe	Gly 235	Gly	Ala	Gly	Val	Gly 240
				245					250		Val		-	255	
Gly	Gly	Tyr	Ser 260	Val	Phe	Ala	Gly	Val 265	Gly	Glu	Arg	Thr	Arg 270	Glu	Gly

Asn	Asp	Leu 275	Tyr	His	Glu	Met	Ile 280		Ser	Gly	Val	11e 285		Leu	Lys
Asp	Ala 290		Ser	Lys	Val	Ala 295		Val	Туг	Gly	Gln 300		Asn	Glu	Pro
Pro 305	Gly	Ala	Arg	Ala	Arg 310	Val	Ala	Leu	Thr	Gly 315		Thr	Val	Ala	Glu 320
Tyr	Phe	Arg	Asp	Gln 325	Glu	Gly	Gln	Asp	Val 330		Leu	Phe	Ile	Asp 335	
Ile	Phe	Arg	Phe 340	Thr	Gln	Ala	Gly	Ser 345		Val	Ser	Ala	Leu 350	Leu	Gl
Arg	Ile	Pro 355	Ser	Ala	Val	Gly	Туг 360	Gln	Pro	Thr	Leu	Ala 365	Thr	Asp	Met
Gly	Thr 370		Gln	Glu	Arg	Ile 375	Thr	Thr	Thr	ГÀЗ	Tys		Ser	Ile	Thr
ser 385	Val	Gln	Ala	Ile	Туг 390	Val	Pro	Ala	Asp	Asp 395		Thr	Asp	Pro	Ala 400
Pro	Ala	Thr	Thr	Phe 405	Ala	His	Leu	Asp	Ala 410	Thr	Thr	Val	Leu	Ser 415	Arg
Ala	Ile	Ala	Glu 420	Leu	Gly	Ile	Tyr	Pro 425	Ala	Val	Asp	Pro	Leu 430	Asp	Ser
Thr	Ser	Arg 435	Ile	Met	Asp	Pro	Asn 440	Ile	Val	Gly	Ser	Glu 445	His	Tyr	Asp
Val	Ala 450	Arg	Gly	Val	Gln	Lys 455	Ile	Leu	Gln	Asp	туг 460	Lys	Ser	Leu	Gln
Asp 465	Ile	Ile	Ala	Ile	Leu 470	Gly	Met	Asp	Glu	Leu 475	Ser	Glu	Glu	Asp	Lys 480
Leu	Thr	Val	Ser	Arg 485	Ala	Arg	Lys	Ile	Gln 490	Arg	Phe	Leu	Ser	Gln 495	Pro
Phe	Gln	Val	Ala 500	Glu	Val	Phe	Thr	Gly 505	His	Met	Gly	Lys	Leu 510	Val	Pro
Leu	Lys	Glu 515	Thr	Ile	Lys	Gly	Phe 520	Gln	Gln	Ile	Leu	Ala 525	Gly	Glu	Туг
4sp	His 530	Leu	Pro	Glu	Gln	Ala 535	Phe	Tyr	Met	Val	Gly 540	Pro	Ile	Glu	Glu

1375

Ala Val Ala Lys Ala Asp Lys Leu Ala Glu Glu His Ser Ser 545 550 555

<210> 1330

<211> 134

<212> PRT

<213> Homo sapiens

<400> 1330

Thr Thr Pro Leu Ser Gln Ile Val Ala Arg Gly Leu Ile Ala Arg Gly
1 5 10 15

Val Pro Gly Ala Ile Val Asn Val Ser Ser Gln Cys Ser Gln Arg Ala 20 25 30

Val Thr Asn His Ser Val Tyr Cys Ser Thr Lys Gly Ala Leu Asp Met $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Leu Thr Lys Val Met Ala Leu Glu Leu Gly Pro His Lys Ile Arg Val 50 60

Asn Ala Val Asn Pro Thr Val Val Met Thr Ser Met Gly Gln Ala Thr 65 70 75 80

Trp Ser Asp Pro His Lys Ala Lys Thr Met Leu Asn Arg Ile Pro Leu 85 90 95

Gly Lys Phe Ala Glu Val Glu His Val Val Asn Ala Ile Leu Phe Leu $100 \hspace{1.5cm} 105 \hspace{1.5cm} 110 \hspace{1.5cm}$

Leu Ser Asp Arg Ser Gly Met Thr Thr Gly Ser Thr Leu Pro Val Glu 115 120 125

Gly Gly Phe Trp Ala Cys 130

<210> 1331

<211> 188

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (135)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE <222> (137) <223> Xaa equals any of the naturally occurring L-amino acids Ile Arg His Glu Pro Ser Arg Cys Arg Ser Arg Thr Ala Ala Val Cys Ser Pro Pro Pro Cys Pro Pro Trp Arg Arg Pro Arg Gly Pro Trp Thr 25 Ala Lys Ser Pro Pro Trp Pro Pro Ala Arg Pro Arg Trp Gln Trp Thr Arg Ala Leu Asn Ser Thr Ala Ala Pro Pro Arg Ser Pro Pro Ala Pro Cys Pro Cys Arg Pro Asn Ser Ala Arg Arg Lys Arg Arg Pro Pro Ala 70 75 Asn Cys Arg Ala Ser Ser Gly Trp Leu Ala Ala Trp Lys Pro Ser Arg 90 Thr Gly Pro Ala Ala Arg Pro Arg Arg Pro Val Pro Asp Thr Ser Phe 105 His Ser Ser Pro Val Gln Ala Ala Val His Phe Val Gly Tyr Lys Ile 120 Asn His Gly Pro Ala Met Xaa Leu Xaa Phe Leu Leu Gln Leu Arg Leu 135 Gly Arg Gly Pro Gly Leu Pro Arg Glu Asn Val Leu Glu Thr Ala Pro Val Phe Leu Ala Trp Phe Ile Cys Pro Gly Ser Gly Ser Asp Ser Gly

170

185

Gly Ser Glu Thr Ser Val Ala Leu Ser Tyr Trp Gly

<210> 1332

<211> 237

<212> PRT

<213> Homo sapiens

180

<220>

<221> SITE

<222> (5)

- <223> Xaa equals any of the naturally occurring L-amino acids
- <400> 1332
- Asp Asp Arg Arg Xaa Asp Ala Glu Ala Asp Lys Met Ala Ala Ala Ala 1 5 10 15
- Val Gln Gly Gly Arg Ser Gly Gly Ser Gly Gly Cys Ser Gly Ala Gly 20 25 30
- Gly Ala Ser Asn Cys Gly Thr Gly Ser Gly Arg Ser Gly Leu Leu Asp $35 \hspace{1cm} 40 \hspace{1cm} 45$
- Lys Trp Lys Ile Asp Asp Lys Pro Val Lys Ile Asp Lys Trp Asp Gly 50 55 60
- Ser Ala Val Lys Asn Ser Leu Asp Asp Ser Ala Lys Lys Val Leu Leu 65 70 75 80
- Glu Lys Tyr Lys Tyr Val Glu Asn Phe Gly Leu Ile Asp Gly Arg Leu 85 90 95
- Thr Ile Cys Thr Ile Ser Cys Phe Phe Ala Ile Val Ala Leu Ile Trp
 100 105 110
- Asp Tyr Met His Pro Phe Pro Glu Ser Lys Pro Val Leu Ala Leu Cys 115 120 125
- Val Ile Ser Tyr Phe Val Met Met Gly Ile Leu Thr Ile Tyr Thr Ser 130 135 140
- Tyr Lys Glu Lys Ser Ile Phe Leu Val Ala His Arg Lys Asp Pro Thr 145 150 155 160
- Gly Met Asp Pro Asp Asp Ile Trp Gln Leu Ser Ser Ser Leu Lys Arg 165 170 175
- Phe Asp Asp Lys Tyr Thr Leu Lys Leu Thr Phe Ile Ser Gly Arg Thr 180 185 190
- Lys Gln Gln Arg Glu Ala Glu Phe Thr Lys Ser Ile Ala Lys Phe Phe 195 200 205
- Asp His Ser Gly Thr Leu Val Met Asp Ala Tyr Glu Pro Glu Ile Ser 210 215 220
- Arg Leu His Asp Ser Leu Ala Ile Glu Arg Lys Ile Lys 225 230 235

<210> 1333

<211> 56

<212> PRT

<213> Homo sapiens

<400> 1333

Thr Thr Ala Asn Pro Leu Lys Thr Arg Gly Leu Ala Leu Val Ala Gln
1 5 10 15

Pro Lys Val Ala Leu Gln Ile Phe Glu Arg Ala Thr Ala Thr Phe Leu 20 25 30

Pro Ser Gln Leu Ser Leu Asp Phe Ser Glu Ser Gly Tyr Cys Tyr Pro 35 40 45

Asn Val Cys Leu Tyr Glu Cys Ile 50 55

<210> 1334

<211> 207

<212> PRT

<213> Homo sapiens

<400> 1334

Ser His Pro Ala Cys Ala Lys Val Glu Tyr Ala Tyr Ser Asp Asn Ser 1 5 10 15

Leu Asp Pro Asp Asp Glu Asp Ser Asp Tyr His Gln Glu Ala Tyr Lys
20 25 30

Glu Ser Tyr Lys Asp Arg Arg Arg Arg Ala His Thr Gln Ala Glu Gln
35 40 45

Lys Arg Arg Asp Ala Ile Lys Arg Gly Tyr Asp Asp Leu Gln Thr Ile 50 55 60

Val Pro Thr Cys Gln Gln Gln Asp Phe Ser Ile Gly Ser Gln Lys Leu 65 70 75 80

Ser Lys Ala Ile Val Leu Gln Lys Thr Ile Asp Tyr Ile Gln Phe Leu 85 90 95

His Lys Glu Lys Lys Gln Glu Glu Glu Val Ser Thr Leu Arg Lys
100 105 110

Asp Val Thr Ala Leu Lys Ile Met Lys Val Asn Tyr Glu Gln Ile Val 115 120 125

Lys Ala His Gln Asp Asn Pro His Glu Gly Glu Asp Gln Val Ser Asp 130 135 140

Gln Val Lys Phe Asn Val Phe Gln Gly Ile Met Asp Ser Leu Phe Gln Ser Phe Asn Ala Ser Ile Ser Val Ala Ser Phe Gln Glu Leu Ser Ala 165 170 Cys Val Phe Ser Trp Ile Glu Glu His Cys Lys Pro Gln Thr Leu Arg 185 Glu Ile Val Ile Gly Val Leu His Gln Leu Lys Asn Gln Leu Tyr 200 <210> 1335 <211> 1005 <212> PRT <213> Homo sapiens <400> 1335 Arg Val Leu Gln Tyr Val Val Pro Glu Val Lys Asp Leu Tyr Asn Trp Leu Glu Val Glu Phe Asn Pro Leu Lys Leu Cys Glu Arg Val Thr Lys Val Leu Asn Trp Val Arg Glu Gln Pro Glu Lys Glu Pro Glu Leu Gln 40 Gln Tyr Val Pro Gln Leu Gln Asn Asn Thr Ile Leu Arg Leu Leu Gln Gln Val Ser Gln Ile Tyr Gln Ser Ile Glu Phe Ser Arg Leu Thr Ser 70 Leu Val Pro Phe Val Asp Ala Phe Gln Leu Glu Arg Ala Ile Val Asp Ala Ala Arg His Cys Asp Leu Gln Val Arg Ile Asp His Thr Ser Arg 100 105 Thr Leu Ser Phe Gly Ser Asp Leu Asn Tyr Ala Thr Arg Glu Asp Ala 120 Pro Ile Gly Pro His Leu Gln Ser Met Pro Ser Glu Gln Ile Arg Asn 135 Gln Leu Thr Ala Met Ser Ser Val Leu Ala Lys Ala Leu Glu Val Ile 150 155

Lys	Pro	Ala	His	11e		Gln	Glu	Lys	Glu 170		Gln	His	Gln	Leu 175	
Val	Thr	Ala	Туг 180	Leu	Lys	Asn	Ser	Arg 185	_	Glu	His	Gln	Arg 190	Ile	Leu
Ala	Arg	Arg 195		Thr	Ile	Glu	Glu 200	Arg	Lys	Glu	Arg	Leu 205		Ser	Leu
Asn	Ile 210		Arg	Glu	Lys	Glu 215	Glu	Leu	Glu	Gln	Arg 220	Glu	Ala	Glu	Leu
Gln 225	-	Val	Arg	Lys	Ala 230		Glu	Glu	Arg	Leu 235	-	Gln	Glu	Ala	Lys 240
Glu	Arg	Glu	Lys	Glu 245	Arg	Ile	Leu	Gln	Glu 250	His	Glu	Gln	Ile	Lys 255	-
Lys	Thr	Val	Arg 260	Glu	Arg	Leu	Glu	Gln 265		Lys	Lys	Thr	Glu 270	Leu	Gly
Ala	Lys	Ala 275		Lys	Asp	Ile	Asp 280	Ile	Glu	Asp	Leu	G1u 285	Glu	Leu	Asp
Pro	Asp 290	Phe	Ile	Met	Ala	Lys 295	Gln	Val	Glu	Gln	Leu 300	Glu	Lys	Glu	Lys
Lys 305	Glu	Leu	Gln	Glu	Arg 310	Leu	Lys	Asn	Gln	Glu 315	Lys	Lys	Ile	Asp	Tyr 320
Phe	Glu	Arg	Ala	Lys 325	Arg	Leu	Glu	Glu	Ile 330	Pro	Leu	Ile	Lys	Ser 335	Ala
Tyr	Glu	Glu	Gln 340	Arg	Ile	Lys	Asp	Met 345	Asp	Leu	Trp	Glu	Gln 350	Gln	Glu
Glu	Glu	Arg 355	Ile	Thr	Thr	Met	Gln 360	Leu	Glu	Arg	Glu	Lys 365	Ala	Leu	Glu
His	Lys 370	Asn	Arg	Met	Ser	Arg 375	Met	Leu	Glu	Asp	Arg 380	Asp	Leu	Phe	Val
Met 385	Arg	Leu	Lys	Ala	Ala 390	Arg	Gln	Ser	Val	Tyr 395	Glu	Glu	Lys	Leu	Lys 400
Gln	Phe	Glu	Glu	Arg 405	Leu	Ala	Glu	Glu	Arg 410	His	Asn	Arg	Leu	Glu 415	Glu
Arg	Lys	Arg	Gln 420	Arg	Lys	Glu	Glu	Arg 425	Arg	Ile	Thr	Tyr	Tyr 430	Arg	Glu

Lys	s Glu	435		ı GLu	ı Gin	Arg	440		GLu	Glu	GIn	Met 445		ı Lys	G L
Arg	450		Arg	Glu	Arg	Ala 455		Arg	Ala	Lys	Arg 460		Glu	Glu	. Le
Arg 465	g Glu	Tyr	Gln	Glu	Arg 470		Lys	Ĺуs	Leu	Glu 475		Val	Glu	Arg	48)
Lys	Arg	Gln	Arg	Glu 485		Glu	Ile	Glu	Glu 490	-	Glu	Arg	Arg	495	
Glu	Glu	Arg	Arg 500		Gly	Asp	Ser	Ser 505		Ser	Arg	Lys	Asp 510		Arç
Trp	Gly	Asp 515		Asp	Ser	Glu	Gly 520	Thr	Trp	Arg	Lys	Gly 525		Glu	Alá
ĄsĄ	Ser 530		Trp	Arg	Arg	Gly 535		Pro	Glu	Lys	Glu 540	-	Arg	Arg	G12
Glu 545	Gly	Arg	Asp	Glu	Asp 550	Arg	Ser	His	Arg	Arg 555	Asp	Glu	Glu	Arg	Pro 560
Arg	Arg	Leu	Gly	Asp 565	Asp	Glu	Asp	Arg	Glu 570	Pro	Ser	Leu	Arg	Pro 575	-
Asp	Asp	Arg	Val 580	Pro	Arg	Arg	Gly	Met 585	Asp	Asp	Asp	Arg	Gly 590		Arg
Arg	Gly	Pro 595	Glu	Glu	Asp	Arg	Phe 600	Ser	Arg	Arg	Gly	Ala 605	Asp	Asp	Asp
Arg	Pro 610	Ser	Trp	Arg	Asn	Thr 615	Asp	Asp	Asp	Arg	Pro 620	Pro	Arg	Arg	Ile
625	Asp				630					635			_	_	640
	Arg			645					650					655	
	Asp		660					665					670		
	Gly	675					680					685			
Asp	Arg 690	Gly	Pro	Arg	Arg	Gly 695	Leu	Asp	Asp	Asp	Arg 700	Gly	Pro	Arg	Arg

Gly 705		. Asp	Asp	Asp	710		Pro	Arg	Arg	715		Asp	Asp	Asp	720
Gly	Pro	Arg	Arg	Gly 725		Asp	Asp	Asp	Arg 730	_	Pro	Arg	Arg	Gly 735	
Asp	Asp	Asp	Arg 740	Gly	Pro	Trp	Arg	Asn 745		Asp	Asp	Asp	750		Pro
Arg	Arg	Gly 755		Glu	Asp	Asp	Arg 760		Pro	Trp	Arg	Asn 765		Asp	Asp
Asp	Arg 770		Ser	Arg	Arg	Ala 775	_	Asp	Asp	Arg	Phe 780		Arg	Arg	Gly
Asp 785	Asp	Ser	Arg	Pro	Gly 790	Pro	Trp	Arg	Pro	Leu 795		Lys	Pro	Gly	Gly 800
Trp	Arg	Glu	Lys	Glu 805	Lys	Ala	Arg	Glu	Glu 810		Trp	Gly	Pro	Pro 815	
Glu	Ser	Arg	Pro 820	Ser	Glu	Glu	Arg	Glu 825	Trp	Asp	Arg	Glu	Lys 830		Arg
Asp	Arg	Asp 835	Asn	Gln	Asp	Arg	Glu 840	Glu	Asn	Asp	Lys	Asp 845	Pro	Glu	Arg
Glu	Arg 850		Arg	Glu	Arg	Asp 855	Val	Asp	Arg	Glu	Asp 860	Arg	Phe	Arg	Arg
Pro 865	Arg	Asp	Glu	Gly	Gly 870	Trp	Arg	Arg	Gly	Pro 875	Ala	Glu	Glu	Ser	Ser 880
Ser	Trp	Arg	Asp	Ser 885	Ser	Arg	Arg	Asp	Asp 890	Arg	Asp	Arg	Asp	Asp 895	Arg
Arg	Arg	Glu	Arg 900	Asp	Asp	Arg	Arg	Asp 905	Leu	Arg	Glu	Arg	Arg 910	Asp	Leu
Arg	Asp	Asp 915	Arg	Asp	Arg	Arg	Gly 920	Pro	Pro	Leu	Arg	Ser 925	Glu	Arg	Glu
31u	Val 930	Ser	Ser	Trp	Arg	Arg 935	Ala	Asp	Asp	Arg	Lys 940	Asp	Asp	Arg	Val
31u 945	Glu	Arg	Asp	Pro	Pro 950	Arg	Arg	Val	Pro	Pro 955	Pro	Ala	Leu	Ser	Arg 960
sp	Arg	Glu	Arg	Asp 965	Arg	Asp	Arg	Glu	Arg 970	Glu	Gly	Glu	Lys	Glu 975	Lys

Ala Ser Trp Arg Ala Glu Lys Asp Arg Glu Ser Leu Arg Arg Thr Lys 980 985 990 Asn Glu Thr Asp Glu Asp Gly Trp Thr Thr Val Arg Arg 995 1000 <210> 1336 <211> 231 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (52) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (64) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (73) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (79) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (82) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (83) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (118) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1336 Ala Gly Ile His Pro Met Asn Ser Ile Ser Ser Leu Asp Arg Thr Arg

Met Met Thr Pro Phe Met Gly Ile Ser Pro Leu Pro Gly Gly Glu Arg 20 25 30

Phe Pro Tyr Pro Ser Phe His Trp Asp Pro Ile Arg Asp Pro Leu Arg 35 40 45

Asp Pro Tyr Xaa Glu Leu Asp Ile His Arg Arg Asp Pro Leu Gly Xaa 50 60

Asp Phe Leu Leu Arg Asn Asp Pro Xaa His Arg Leu Ser Thr Xaa Arg 65 70 75 80

Leu Xaa Xaa Ala Asp Arg Ser Phe Arg Asp Arg Glu Pro His Asp Tyr
85 90 95

Ser His His His His His His His His Pro Leu Ser Val Asp Pro Arg

Arg Glu His Glu Arg Xaa Gly His Leu Asp Glu Arg Glu Arg Leu His

Met Leu Arg Glu Asp Tyr Glu His Thr Arg Leu His Ser Val His Pro 130 135 140

Ala Ser Leu Asp Gly His Leu Pro His Pro Ser Leu Ile Thr Pro Gly 145 150 150 155

Leu Pro Ser Met His Tyr Pro Arg Ile Ser Pro Thr Ala Gly Asn Gln
165 170 175

Asn Gly Leu Leu Asn Lys Thr Pro Pro Thr Ala Ala Leu Ser Ala Pro 180 185 190

Pro Pro Leu Ile Ser Thr Leu Gly Gly Arg Pro Val Ser Pro Arg Arg

Thr Thr Pro Leu Ser Ala Glu Ile Arg Glu Arg Pro Pro Ser His Thr 210 215 220

Leu Lys Asp Ile Glu Ala Arg 225 230

<210> 1337

<211> 155

<212> PRT

<213> Homo sapiens

<400> 1337

Gly Val Glu Gly Leu Lys Asp Ala Gln Met Arg Asp Leu Leu Ser Pro 1 5 10 15

Pro Thr Asp Asn Arg Pro Gly Gln Met Asp Asn Arg Ser Lys Leu Arg 20 25 30

As nIle Val Glu Leu Arg Leu Ala Gly Leu Asp Ile Thr Asp Ala Ser 35 40 45

Leu Arg Leu Ile Ile Arg His Met Pro Leu Leu Ser Lys Leu His Leu 50 55 60

Ser Tyr Cys Asn His Val Thr Asp Gln Ser Ile Asn Leu Leu Thr Ala 65 70 75 80

Val Gly Thr Thr Thr Arg Asp Ser Leu Thr Glu Ile Asn Leu Ser Asp 85 90 95

Cys Asn Lys Val Thr Asp Gln Cys Leu Ser Phe Phe Lys Arg Cys Gly
100 105 110

As nIle Cys His Ile Asp Leu Arg Tyr Cys Lys Gln Val Thr Lys Glu 115 120 125

Gly Cys Glu Gln Phe Ile Ala Glu Met Ser Val Ser Val Gln Phe Gly 130 135 140

Gln Val Glu Glu Lys Leu Leu Gln Lys Leu Ser 145 150 155

<210> 1338

<211> 328

<212> PRT

<213> Homo sapiens

<400> 1338

Asn Asn Ser Gly Val Met Pro Glu Met Pro Glu Asp Met Glu Glu Glu 1 5 10 15

Glu Val Asn Ile Pro Asn Arg Arg Val Leu Val Thr Gly Ala Thr Gly 20 25 30

Leu Leu Gly Arg Ala Val His Lys Glu Phe Gln Gln Asn Asn Trp His 35 40 45

Ala Val Gly Cys Gly Phe Arg Arg Ala Arg Pro Lys Phe Glu Gln Val 50 60

Asn Leu Leu Asp Ser Asn Ala Val His His Ile Ile His Asp Phe Gln

65					70					75					80
Pro	His	Val	Ile	val 85		Cys	Ala	Ala	G1u 90	-	Arg	Pro	Asp	Val 95	
Glu	Asn	Gln	Pro 100	Asp	Ala	Ala	Ser	Gln 105		Asn	Val	Asp	Ala 110	Ser	Gly
Asn	Leu	Ala 115	-	Glu	Ala	Ala	Ala 120		Gly	Ala	Phe	Leu 125		Tyr	Ile
Ser	Ser 130		Tyr	Val	Phe	Asp 135	-	Thr	Asn	Pro	Pro 140	_	Arg	Glu	Glu
Asp 145	Ile	Pro	Ala	Pro	Leu 150	Asn	Leu	туг	Gly	Lys 155		Lys	Leu	Asp	Gly 160
Glu	Lys	Ala	Val	Leu 165		Asn	Asn	Leu	Gly 170		Ala	Val	Leu	Arg 175	
Pro	Ile	Leu	Tyr 180	Gly	Glu	Val	Glu	Lys 185	Leu	Glu	Glu	Ser	Ala 190	Val	Thr
Val	Met	Phe 195	Asp	Lys	Val	Gln	Phe 200	Ser	Asn	Lys	Ser	Ala 205	Asn	Met	Asp
His	Trp 210	Gln	Gln	Arg	Phe	Pro 215	Thr	His	Val	Lys	Asp 220	Val	Ala	Thr	Val
Cys 225	Arg	Gln	Leu	Ala	Glu 230	Lys	Arg	Met	Leu	Asp 235	Pro	Ser	Ile	Lys	Gly 240
Thr	Phe	His	Trp	Ser 245	Gly	Asn	Glu	Gln	Met 250	Thr	Lys	Tyr	Glu	Met 255	Ala
Cys	Ala	Ile	Ala 260	Asp	Ala	Phe	Asn	Leu 265	Pro	Ser	Ser	His	Leu 270	Arg	Pro
Ile	Thr	Asp 275	Ser	Pro	Val	Leu	Gly 280	Ala	Gln	Arg	Pro	Arg 285	Asn	Ala	Gln
Leu	Asp 290	Cys	Ser	Lys	Leu	Glu 295	Thr	Leu	Gly	Ile	Gly 300	Gln	Arg	Thr	Pro
Phe 305	Arg	Ile	Gly	Ile	Lys 310	Glu	Ser	Leu	Trp	Pro 315	Phe	Leu	Ile	Asp	Lys 320
Arg	Trp	Arg	Gln	Thr	Val	Phe	His								

1387

<210> 1339

<211> 64

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (2)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1339

Leu Xaa His Pro Phe Ala Val Thr Ser Tyr Gly Lys Asn Leu Tyr Phe 1 $$ 5 $$ 10 $$ 15

Thr Asp Trp Lys Met Asn Ser Val Val Ala Leu Asp Leu Ala Ile Ser 20 25 30

Lys Glu Thr Asp Ala Phe Gln Pro His Lys Gln Thr Arg Leu Tyr Gly $35 \hspace{1cm} 40 \hspace{1cm} 45$

Ile Thr Thr Ala Leu Ser Gln Cys Pro Gln Ala Ile Thr Thr Ala Gln 50 60

<210> 1340

<211> 155

<212> PRT

<213> Homo sapiens

<400> 1340

Arg Lys Met Ala Val Glu Ser Arg Val Thr Gln Glu Glu Ile Lys Lys

1 5 10 15

Glu Pro Glu Lys Pro Ile Asp Arg Glu Lys Thr Cys Pro Leu Leu 20 25 30

Arg Val Phe Thr Thr Asn Asn Gly Arg His His Arg Met Asp Glu Phe $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45 \hspace{1.5cm}$

Ser Arg Gly Asn Val Pro Ser Ser Glu Leu Gln Ile Tyr Thr Trp Met 50 55 60

Asp Ala Thr Leu Lys Glu Leu Thr Ser Leu Val Lys Glu Val Tyr Pro 65 70 75 80

Glu Ala Arg Lys Lys Gly Thr His Phe Asn Phe Ala Ile Val Phe Thr

1388

85 90 95

Asp Val Lys Arg Pro Gly Tyr Arg Val Lys Glu Ile Gly Ser Thr Met $100 \hspace{1cm} 105 \hspace{1cm} 105 \hspace{1cm} 110$

Ser Gly Arg Lys Gly Thr Asp Asp Ser Met Thr Leu Gln Ser Gln Lys 115 120 125

Phe Gln Ile Gly Asp Tyr Leu Asp Ile Ala Ile Thr Pro Pro Asn Arg 130 135 140

Ala Pro Pro Pro Ser Gly Arg Met Arg Pro Tyr 145 150 155

<210> 1341

<211> 72

<212> PRT

<213> Homo sapiens

<400> 1341

Ala Gln Leu Pro Ser Ser Ser Phe Leu Arg His Arg Gly Val Phe Leu 1 5 10 15

Thr Pro Leu Leu Ala Met Ser Ser His Lys Thr Phe Arg Ile Lys Arg

Phe Leu Ala Lys Lys Gln Lys Gln Asn Arg Pro Ile Pro Gln Trp Ile 35 40 45

Arg Met Lys Thr Gly Asn Lys Ile Arg Tyr Asn Ser Lys Arg Arg His 50 55 60

Trp Arg Arg Thr Lys Leu Gly Leu 65 70

<210> 1342

<211> 270

<212> PRT

<213> Homo sapiens

<400> 1342

Leu Lys Val Ala Gln Thr Asp Gly Val Asn Val Asp Met His Leu Lys

1 10 15

Gln Ile Glu Ile Lys Lys Phe Lys Tyr Gly Ile Glu Glu His Gly Lys 20 25 30

Val	Lys	Met 35	-	Gly	Gly	Leu	Leu 40	Arg	Thr	Tyr	Ile	Ile 45	Ser	Ile	Leu
Phe	Lys 50	Ser	Ile	Phe	Glu	Val 55	Ala	Phe	Leu	Leu	Ile 60	Gln	Trp	Tyr	Ile
Tyr 65	Gly	Phe	Ser	Leu	Ser 70	Ala	Val	Tyr	Thr	Cys 75	Lys	Arg	Asp	Pro	Cys 80
Pro	His	Gln	Val	Asp 85	Cys	Phe	Leu	Ser	Arg 90	Pro	Thr	Glu	Lys	Thr 95	Ile
Phe	Ile	Ile	Phe 100	Met	Leu	Val	Val	Ser 105	Leu	Val	Ser	Leu	Ala 110	Leu	Asn
Ile	Ile	Glu 115	Leu	Phe	Туг	Val	Phe 120	Phe	Lys	Gly	Val	Lys 125	Asp	Arg	Val
Lys	Gly 130	Lys	Ser	Asp	Pro	Tyr 135	His	Ala	Thr	Ser	Gly 140	Ala	Leu	Ser	Pro
Ala 145	Lys	Asp	Cys	Gly	Ser 150	Gln	Lys	Tyr	Ala	Туг 155	Phe	Asn	Gly	Cys	Ser 160
Ser	Pro	Thr	Ala	Pro 165	Leu	Ser	Pro	Met	Ser 170	Pro	Pro	Gly	Tyr	Lys 175	Leu
Val	Thr	Gly	Asp 180	Arg	Asn	Asn	Ser	Ser 185	Суѕ	Arg	Asn	Tyr	Asn 190	Lys	Gln
Ala	Ser	Glu 195	Gln	Asn	Trp	Ala	Asn 200	Tyr	Ser	Ala	Glu	Gln 205	Asn	Arg	Met
Gly	Gln 210	Ala	Gly	Ser	Thr	11e 215	Ser	Asn	Ser	His	Ala 220	Gln	Pro	Phe	Asp
Phe 225	Pro	Asp	Asp	Asn	Gln 230	Asn	Ser	Lys	Lys	Leu 235	Ala	Ala	Gly	His	Glu 240
Leu	Gln	Pro	Leu	Ala 245	Ile	Val	Asp	Gln	Arg 250	Pro	Ser	Ser	Arg	Ala 255	Ser
Ser	Arg	Ala	Ser 260	Ser	Arg	Pro	Arg	Pro 265	Asp	Asp	Leu	Glu	Ile 270		

<210> 1343

<211> 94

<212> PRT

<213> Homo sapiens

<220>

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<221> SITE
<222> (55)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1343
Gln Glu Leu Arg Ser Pro Ser Arg Ser Pro Ser Pro Pro Pro Lys Ser
                        10
Pro Pro Trp Thr Thr Gly Gly Ser Leu Cys Glu Gln Leu Ala Phe Arg
Lys Pro Leu Ser Val Phe Lys Gln Lys Val Glu Gly Ala Thr Lys Gln
                            40
Ala Ala Val Arg Ala Ser Xaa Cys Arg Pro Leu Pro Cys Ser Ser Ser
Ser Phe Ala Ser Ala Ser Ser Val Met Phe Cys Leu Glu Phe Tyr Leu
                    70
                                        75
 65
Asp Phe Phe Ser Gly Tyr Phe Ser Val Phe Gln Pro Leu Leu
                 85
<210> 1344
<211> 125
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (118)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (122)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (123)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1344
Tyr Ser Thr Arg Ala Leu Trp Lys Pro Asn His Val His Val Cys Val
                                    10
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Cys Val Cys Ala Ser Phe Glu Pro Pro Ser Thr Ala Ala Ser Ser His $20 \hspace{1cm} 25 \hspace{1cm} 30$

Asp Thr Lys Leu Ile Ser Thr Phe Leu Trp Val Ala Gln Gly Leu 35 40 45

Ile Ala Ser His Ser Ile Thr Arg Ile Glu Ala Arg His Gly Gly Ala 50 60

Cys Leu Val Val Pro Ala Lys Leu Gly Arg Leu Glu Gly Arg Glu Gly 65 70 75 80

Ser Leu Trp Ser Pro Gly Arg Leu Glu Gly Trp Gln Trp Ser His Gly 85 90 95

Ser Gly Gly His Trp His Phe Gln Pro Gly Gly Gly Arg Val Glu Thr 100 105 110

Phe Val Leu Gln Lys Xaa Lys Lys Lys Xaa Xaa Gly Gly 115 120 125

<210> 1345

<211> 131

<212> PRT

<213> Homo sapiens

<400> 1345

Pro Arg Val Arg Arg Leu Arg Glu Asp Asp Arg Arg Gly Phe Leu Ser 1 5 10 15

Phe Arg Ala Asp Ser Ala His Ala Ser Met Val Asn Val Pro Lys Thr 20 25 30

Arg Arg Thr Phe Cys Lys Lys Cys Gly Lys His Gln Pro His Lys Val

Thr Gln Tyr Lys Lys Gly Lys Asp Ser Leu Tyr Ala Gln Gly Lys Arg
50 55 60

Arg Tyr Asp Arg Lys Gln Ser Gly Tyr Gly Gly Gln Thr Lys Pro Ile 65 70 75 80

Phe Arg Lys Lys Ala Lys Thr Thr Lys Lys Ile Val Leu Arg Leu Glu 85 90 95

Cys Val Glu Pro Asn Cys Arg Ser Lys Arg Met Leu Ala Ile Lys Arg 100 105 110

Cys Lys His Phe Glu Leu Gly Gly Asp Lys Lys Arg Lys Gly Gln Val

1392

115 120 125

Ile Gln Phe 130

<210> 1346

<211> 75

<212> PRT

<213> Homo sapiens

<400> 1346

Asn Lys Arg Asn Cys Lys Phe Pro Leu Leu Lys Ile Thr Lys Ile Thr 1 5 10 15

Glu Thr Lys Glu Glu Ile Arg Ile Trp Gly Ile Val Leu Asn Asn Leu 20 25 30

Val Val Lys Lys Asn Asn Cys Ala Cys Leu Asp Leu Asn Lys Pro Pro 35 40 45

Ser Lys Cys Glu Gly Ser Ser Asn Phe Ser Lys His Met Lys Val Leu 50 55

Ile His Phe Asp Lys Gly Pro Leu Lys Lys Ser 65 70 75

<210> 1347

<211> 413

<212> PRT

<213> Homo sapiens

<400> 1347

Gly Val Ala Arg Ala Gln Pro Val Pro Ala Val Leu Ser Trp Leu Leu 1 5 10 15

Ala Leu Leu Arg Cys Ala Ala Thr Met Leu Ser Leu Arg Val Pro Leu 20 25 30

Ala Pro Ile Thr Asp Pro Gln Gln Leu Gln Leu Ser Pro Leu Lys Gly 35 40 45

Leu Ser Leu Val Asp Lys Glu Asn Thr Pro Pro Ala Leu Ser Gly Thr 50 55 60

Arg Val Leu Ala Ser Lys Thr Ala Arg Arg Ile Phe GIn Glu Pro Thr 65 70 75 80

Glu	Pro	Lys	Thr	Lys 85	Ala	Ala	Ala	Pro	Gly 90		Glu	Asp	Glu	Pro 95	
Leu	Arg	Glu	Asn 100	Pro	Arg	Arg	Phe	Val 105		Phe	Pro	Ile	Glu 110	_	His
Asp	Ile	Trp 115	Gln	Met	Tyr	Lys	Lys 120	Ala	Glu	Ala	Ser	Phe 125	_	Thr	Ala
Glu	Glu 130		Asp	Leu	Ser	Lys 135	Asp	Ile	Gln	His	Trp 140		Ser	Leu	Lys
Pro 145	Glu	Glu	Arg	Tyr	Phe 150	Ile	Ser	His	Val	Leu 155	Ala	Phe	Phe	Ala	Ala 160
Ser	Asp	Gly	Ile	Val 165	Asn	Glu	Asn	Leu	Val 170	Glu	Arg	Phe	Ser	Gln 175	
Val	Gln	Ile	Thr 180	Glu	Ala	Arg	Cys	Phe 185	Tyr	Gly	Phe	Gln	Ile 190	Ala	Met
Glu	Asn	11e 195	His	Ser	Glu	Met	Туг 200	Ser	Leu	Leu	Ile	Asp 205	Thr	Tyr	Ile
Lys	Asp 210	Pro	Lys	Glu	Arg	Glu 215	Phe	Leu	Phe	Asn	Ala 220	Ile	Glu	Thr	Met
Pro 225	Cys	Val	Lys	Lys	Lys 230	Ala	Asp	Trp	Ala	Leu 235	Arg	Trp	Ile	Gly	Asp 240
Lys	Glu	Ala	Thr	туr 245	Gly	Glu	Arg	Val	Val 250	Ala	Phe	Ala	Ala	Val 255	Glu
Gly	Ile	Phe	Phe 260	Ser	Gly	Ser	Phe	Ala 265	Ser	Ile	Phe	Trp	Leu 270	Lys	Lys
Arg	Gly	Leu 275	Met	Pro	Gly	Leu	Thr 280	Phe	Ser	Asn	Glu	Leu 285	Ile	Ser	Arg
qaA	Glu 290	Gly	Leu	His	Cys	Asp 295	Phe	Ala	Cys	Leu	Met 300	Phe	Lys	His	Leu
Val 305	His	Lys	Pro	Ser	Glu 310	Glu	Arg	Val	Arg	Glu 315	Ile	Ile	Ile	Asn	Ala 320
/al	Arg	Ile	Glu	Gln 325	Glu	Phe	Leu	Thr	Glu 330	Ala	Leu	Pro	Val	Lys 335	Leu
lle	Gly	Met	Asn 340	Cys	Thr	Leu	Met	Lys 345	Gln	Tyr	Ile	Glu	Phe 350	Val	Ala

Asp Arg Leu Met Leu Glu Leu Gly Phe Ser Lys Val Phe Arg Val Glu Asn Pro Phe Asp Phe Met Glu Asn Ile Ser Leu Glu Gly Lys Thr Asn 375 380 Phe Phe Glu Lys Arg Val Gly Glu Tyr Gln Arg Met Gly Val Met Ser 395 Ser Pro Thr Glu Asn Ser Phe Thr Leu Asp Ala Asp Phe 405 410 <210> 1348 <211> 243 <212> PRT <213> Homo sapiens Thr Gly Asn Lys Met Gln Asp Pro Asn Ala Asp Thr Glu Trp Asn Asp 1.0 Ile Leu Arg Lys Lys Gly Ile Leu Pro Pro Lys Glu Ser Leu Lys Glu Leu Glu Glu Glu Ala Glu Glu Glu Gln Arg Ile Leu Gln Gln Ser Val 40 Val Lys Thr Tyr Glu Asp Met Thr Leu Glu Glu Leu Glu Asp His Glu Asp Glu Phe Asn Glu Glu Asp Glu Arg Ala Ile Glu Met Tyr Arg Arg Arg Arg Leu Ala Glu Trp Lys Ala Thr Lys Leu Lys Asn Lys Phe Gly Glu Val Leu Glu Ile Ser Gly Lys Asp Tyr Val Gln Glu Val Thr Lys 105 Ala Gly Glu Gly Leu Trp Val Ile Leu His Leu Tyr Lys Gln Gly Ile 115 120 Pro Leu Cys Ala Leu Ile Asn Gln His Leu Ser Gly Leu Ala Arg Lys 135 140 Phe Pro Asp Val Lys Phe Ile Lys Ala Ile Ser Thr Thr Cys Ile Pro 150

Asn Tyr Pro Asp Arg Asn Leu Pro Thr Ile Phe Val Tyr Leu Glu Gly

1395

165 175 170 Asp Ile Lys Ala Gln Phe Ile Gly Pro Leu Val Phe Gly Gly Met Asn 185 Leu Thr Arg Asp Glu Leu Glu Trp Lys Leu Ser Glu Ser Gly Ala Ile 205 200 195 Met Thr Asp Leu Glu Glu Asn Pro Lys Lys Pro Ile Glu Asp Val Leu 215 Leu Ser Ser Val Arg Arg Ser Val Leu Met Lys Arg Asp Ser Asp Ser 225 Glu Gly Asp <210> 1349 <211> 326 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (137) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (142) <223> Xaa equals any of the naturally occurring L-amino acids Arg Met Ala Thr Pro Leu Pro Pro Pro Ser Pro Arg His Leu Arg Leu 10 Leu Arg Leu Leu Ser Gly Leu Val Leu Gly Ala Ala Leu Arg Gly 25 Ala Ala Ala Gly His Pro Asp Val Ala Ala Cys Pro Gly Ser Leu Asp 40 35 Cys Ala Leu Lys Arg Arg Ala Arg Cys Pro Pro Gly Ala His Ala Cys 55 Gly Pro Cys Leu Gln Pro Phe Gln Glu Asp Gln Gln Gly Leu Cys Val 70

Pro Arg Met Arg Arg Pro Pro Gly Gly Gly Arg Pro Gln Pro Arg Leu

1396

				85	•				90	;				95	
Glu	Asp	Glu	Ile 100	-	Phe	Leu	Ala	Gln 105		Leu	Ala	Arg	Lys 110		Ser
Gly	His	Ser 115		Pro	Pro	Leu	Pro 120	_	Asp	Arg	Gln	Arg 125		Pro	Glu
Pro	Ala 130		Leu	Gly	Phe	Ser 135		Xaa	Gly	Gln	Gly 140		Xaa	Leu	Gly
Leu 145		Ser	Thr	Pro	Gly 150		Pro	Thr	Pro	Thr 155		His	Thr	Ser	Leu 160
Gly	Ser	Pro	Val	Ser 165	Ser	Asp	Pro	Val	His 170		Ser	Pro	Leu	Glu 175	Pro
Arg	Gly	Gly	Gln 180		Asp	Gly	Leu	Ala 185		Val	Leu	Ile	Leu 190	Ala	Phe
Суз	Val	Ala 195	Gly	Ala	Ala	Ala	Leu 200	Ser	Val	Ala	Ser	Leu 205	Суѕ	Trp	Cys
Arg	Leu 210	Gln	Arg	Glu	Ile	Arg 215	Leu	Thr	Gln	Lys	Ala 220	Asp	Tyr	Ala	Thr
Ala 225	Lys	Ala	Pro	Gly	Ser 230	Pro	Ala	Ala	Pro	Arg 235	Ile	Ser	Pro	Gly	Asp 240
Gln	Arg	Leu	Ala	Gln 245	Ser	Ala	Glu	Met	Tyr 250	His	туг	Gln	His	Gln 255	Arg
Gln	Gln	Met	Leu 260	Суз	Leu	Glu	Arg	His 265	Lys	Glu	Pro	Pro	Lys 270	Glu	Leu
Asp	Thr	Ala 275	Ser	Ser	Asp	Glu	Glu 280	Asn	Glu	Asp	Gly	Asp 285	Phe	Thr	Val
Tyr	Glu 290	Cys	Pro	Gly	Leu	Ala 295	Pro	Thr	Gly	Glu	Met 300	Glu	Val	Arg	Asn
Pro 305	Leu	Phe	Asp	His	Ala 310	Ala	Leu	Ser	Ala	Pro 315	Leu	Pro	Ala	Pro	Ser 320
Ser	Pro	Pro	Ala	Leu 325	Pro										

<210> 1350 <211> 62

<212> PRT

<213> Homo sapiens

<400> 1350

Val Lys Ser Asp Thr Pro Pro Cys Val Ser Lys Asn Leu Val Pro Pro 1 5 10 15

Leu His Thr Ser Leu Thr Leu Asn Ile Phe His Trp Ile Leu Asp Arg 20 25 30

Ala Lys Gly Arg Thr Gly Ala Ser Gly Gly Pro Trp Leu Phe Lys Ser 35 40 45

Trp Ile Ile Cys Asp Ser Asn His Lys Phe Leu Ala Asn Phe 50 55 60

<210> 1351

<211> 312

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (299)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1351

Glu Pro Arg Pro Gly Cys Gly Asn Lys Met Ala Gly Lys Lys Asn Val 1 5 10 15

Leu Ser Ser Leu Ala Val Tyr Ala Glu Asp Ser Glu Pro Glu Ser Asp 20 25 30

Gly Glu Ala Gly Ile Glu Ala Val Gly Ser Ala Ala Glu Glu Lys Gly $35 \hspace{1cm} 40 \hspace{1cm} 45$

Gly Leu Val Ser Asp Ala Tyr Gly Glu Asp Asp Phe Ser Arg Leu Gly 50 55 60

Gly Asp Glu Asp Gly Tyr Glu Glu Glu Glu Asp Glu Asn Ser Arg Gln 65 70 75 80

Ser Glu Asp Asp Asp Ser Glu Thr Glu Lys Pro Glu Ala Asp Asp Pro 85 90 95

Lys Asp Asn Thr Glu Ala Glu Lys Arg Asp Pro Gln Glu Leu Val Ala 100 105 110

Ser Phe Ser Glu Arg Val Arg Asn Met Ser Pro Asp Glu Ile Lys Ile

115 120 125 Pro Pro Glu Pro Pro Gly Arg Cys Ser Asn His Leu Gln Asp Lys Ile 135 Gln Lys Leu Tyr Glu Arg Lys Ile Lys Glu Gly Met Asp Met Asn Tyr Ile Ile Gln Arg Lys Lys Glu Phe Arg Asn Pro Ser Ile Tyr Glu Lys 170 Leu Ile Gln Phe Cys Ala Ile Asp Glu Leu Gly Thr Asn Tyr Pro Lys 180 185 Asp Met Phe Asp Pro His Gly Trp Ser Glu Asp Ser Tyr Tyr Glu Ala 200 Leu Ala Lys Ala Gln Lys Ile Glu Met Asp Lys Leu Glu Lys Ala Lys 215 Lys Glu Arg Thr Lys Ile Glu Phe Val Thr Gly Thr Lys Lys Gly Thr Thr Thr Asn Ala Thr Ser Thr Thr Thr Thr Ala Ser Thr Ala Val 245 250 Ala Asp Ala Gln Lys Arg Lys Ser Lys Trp Asp Ser Ala Ile Pro Val 265 Thr Thr Ile Ser Pro Ala His His Pro His His His Ser His Pro Ala 275 280 Ser Cys Cys His Gly His His Gln Arg Gln Xaa Ser Lys Asp His Arg 295 His Leu Cys Cys Gly Ala Pro Leu 305 310 <210> 1352 <211> 259 <212> PRT <213> Homo sapiens <220>

<223> Xaa equals any of the naturally occurring L-amino acids

<221> SITE <222> (7)

<400> 1352

1399

Leu 1	Leu	Asp	ser	Leu 5		Xaa	Asp	Tyr	Ala 10		. TÀ2	Pro	Gln	Pro 15	
Ile	Lys	Ser	Glu 20		Arg	Asn	Pro	Pro 25		Tyr	Ala	Met	Ala 30	_	Lys
Lys	Val	Leu 35		Val	Tyr	Ala	His 40	Gln	Glu	Pro	Lys	Ser 45		Asn	Gly
Ser	Leu 50	Lys	Asn	Val	Ala	Val 55	Asp	Glu	Leu	Ser	Arg 60	Gln	Gly	Cys	Thr
Val 65	Thr	Val	Ser	Asp	Leu 70	Tyr	Ala	Met	Asn	Phe 75	Glu	Pro	Arg	Ala	Thr 80
Asp	Lys	Asp	Ile	Thr 85	Gly	Thr	Leu	Ser	Asn 90		Glu	Val	Phe	Asn 95	
Gly	Val	Glu	Thr 100	His	Glu	Ala	Tyr	Lys 105	Gln	Arg	Ser	Leu	Ala 110	Ser	Asp
Ile	Thr	Asp 115	Glu	Gln	Lys	Lys	Val 120	Arg	Glu	Ala	Asp	Leu 125	Val	Ile	Phe
Gln	Phe 130	Pro	Leu	Tyr	Trp	Phe 135	Ser	Val	Pro	Ala	11e 140	Leu	Lys	Gly	Trp
Met 145	Asp	Arg	Val	Leu	Cys 150	Gln	Gly	Phe	Ala	Phe 155	Asp	Ile	Pro	Gly	Phe 160
Tyr	Asp	Ser	Gly	Leu 165	Leu	Gln	Gly	Lys	Leu 170	Ala	Leu	Leu	Ser	Val 175	Thr
Thr	Gly	Gly	Thr 180	Ala	Glu	Met	Tyr	Thr 185	Lys	Thr	Gly	Val	Asn 190	Gly	Asp
Ser	Arg	Туг 195	Phe	Leu	Trp	Pro	Leu 200	Gln	His	Gly	Thr	Leu 205	His	Phe	Cys
Gly	Phe 2 10	Lys	Val	Leu	Ala	Pro 215	Gln	Ile	Ser	Phe	Ala 220	Pro	Glu	Ile	Ala
Ser 225	Glu	Glu	Glu	Arg	Lys 230	Gly	Met	Val	Ala	Ala 235	Trp	Ser	Gln	Arg	Leu 240
Gln	Thr	Ile	Trp	Lys 245	Glu	Glu	Pro	Ile	Pro 250	Cys	Thr	Ala	His	Trp 255	His

Phe Gly Gln

<210> 1353 <211> 72 <212> PRT <213> Homo sapiens

<400> 1353

Asp Leu Ala Ser Glu Glu His Phe Phe Ser Val Lys Phe Leu Tyr Leu $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$

Lys Ile Gln Lys Tyr Phe Arg Ile Leu Leu Ile Leu Ser Pro Val Phe \$20\$ \$25\$ 30

Thr Ser Phe Trp Lys Thr Cys Ile Thr Met Ser Leu Glu Lys Gly Gln 35 40 45

Arg Lys Ala Phe His Val Lys Ile Arg Ser Leu Ala Ile Ser Asn Pro 50 55

Val Leu Phe Ser Leu His Phe Phe 65 70

<210> 1354

<211> 301

<212> PRT

<213> Homo sapiens

<400> 1354

Lys Arg Arg Arg Leu Glu Gln Arg Gln Gln Pro Asp Glu Gln Arg
1 5 10 15

Arg Arg Ser Gly Ala Met Val Lys Met Ala Ala Ala Gly Gly Gly 20 \$25\$ 30

Gly Gly Gly Arg Tyr Tyr Gly Gly Gly Ser Glu Gly Gly Arg Ala Pro $35 \hspace{1cm} 40 \hspace{1cm} 45 \hspace{1cm}$

Lys Arg Leu Lys Thr Asp Asn Ala Gly Asp Gln His Gly Gly Gly 50 55 60

Asn Tyr Asp Asp Pro His Lys Thr Pro Ala Ser Pro Val Val His Ile 85 90 95

Arg Gly Leu Ile Asp Gly Val Val Glu Ala Asp Leu Val Glu Ala Leu 100 105 110